>> fil reg, d stat que 135; d stat que 136; d stat que 138 FILE 'REGISTRY' ENTERED AT 16:33:48 ON 29 MAR 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by ${\tt InfoChem.}$

STRUCTURE FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8 DICTIONARY FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
L7
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
T.R
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
T. 9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
               SEL L10 1- RN :
                                    3 TERMS
L11
L12
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L27
         22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
L28
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L35
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
               OR L12)
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
1.10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN :
                                     3 TERMS
L12
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
T.15
               STR
                                CH2~ CH2
                                           S02~0
```

VAR G1=4/8/10/12

1

```
VAR G2=N/O
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E2 RC AT 12
CONNECT IS E1 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE L17 SCR 2043

L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17 L20 STR

20 STR

VAR G1=8/9
VAR G2=H/ME
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 8

DEFAULT MLEVEL IS ATOM GGCAT IS SAT AT 9

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

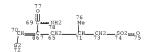
L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20 L31 STR

G4 101

2

Page 2-A

Page 3-A



```
VAR G1=H/ME
VAR G2=H/ME/COOH
VAR G3=CH2/97
VAR G4=2/6/11/16/23/29/37/44/54/85/67/95
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 33
CONNECT IS E2 RC AT 39
CONNECT IS E1 RC AT 41
CONNECT IS E2 RC AT
                     48
                    5.1
CONNECT IS E1 RC AT
CONNECT IS E1 RC AT 63
CONNECT IS E1 RC AT 75
CONNECT IS E1 RC AT 88
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 97

STEREO ATTRIBUTES: NONE

L33 197550 SEA FILE=REGISTRY SUB-L19 SSS PUL L31
L34 48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
O>2
L36 112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
OR L7 OR L12)

L7 50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN L14 587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN L15 STR

VAR G1=4/8/10/12

VAR G2=N/O
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E2 RC AT 12
CONNECT IS E1 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
L17 SCR 2043
L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20 STR

6 7 Ak 88 Cb 89

VAR G1=8/9
VAR G2=H/ME
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 8
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 9
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20 L31 STR

$$\begin{array}{c} \overset{4}{\text{GI}} \\ \overset{4}{\text{COOH}} \\ \overset{4}{\text{GI}} \\ \overset{4}{\text{COOH}} \\ \overset{4}{\text{COOH}} \\ \overset{4}{\text{COOH}} \\ \overset{2}{\text{COOH}} \\ \overset{2}{\text{COOH}$$

G4 101

Page 3-A
VAR G1=H/ME/COOH
VAR G2=H/ME/COOH
VAR G3=C46/11/16/23/29/37/44/54/85/67/95
NODE ATTRIBUTES:
CONNECT 15 E2 RC AT 33
CONNECT 15 E1 RC AT 41
CONNECT 15 E2 RC AT 44
CONNECT 15 E2 RC AT 48
CONNECT 15 E2 RC AT 48
CONNECT 15 E1 RC AT 48

```
CONNECT IS E1 RC AT 63
CONNECT IS E1 RC AT 75
CONNECT IS E1 RC AT 88
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 97

STEREO ATTRIBUTES: NONE

L33 197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34 48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
O>2
L38 296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND

(L14 OR L7)

=> fil capl
FILE 'CAPLUS' ENTERED AT 16:33:59 ON 29 MAR 2010
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FILE COVERS 1907 - 29 Mar 2010 VOL 152 ISS 14
FILE LAST UPDATED: 28 Mar 2010 (20100328/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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=> d que nos 158

17 50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN

18 2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN

OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)

19 3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)

10 3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)

11 SEL L10 1 = RN : 3 TERMS

12 20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN

14 587 SEA FILE=REGISTRY SPE=ON ABB=ON 123-02-4/CRN
```

10/576676

```
1.27
        22795 SEA FILE-REGISTRY SPE-ON ABB-ON 103-11-7/CRN
L28
        54890 SEA FILE-REGISTRY SPE-ON ABB-ON 141-32-2/CRN
L35
         6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
              OR L12)
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
L48
L49
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
          5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
L52
L56
        366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
L58
            50 SEA FILE=CAPLUS SPE=ON ABB=ON L52 AND L56 AND (L48 OR L49)
=> d que nos 155
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
T.7
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
              OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
1.9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN : 3 TERMS
L12
        20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
L17
               SCR 2043
L19
        420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20
               STR
L22
        198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L31
               STR
1.33
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34
        48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
               0>2
L36
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
               OR L7 OR L12)
L48
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
L53
        92433 SEA FILE=CAPLUS SPE=ON ABB=ON L36
            14 SEA FILE=CAPLUS SPE=ON ABB=ON L53 AND L48 AND L49
L55
=> d que nos 151
L7
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
L17
               SCR 2043
L19
       420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20
               STR
L22
        198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L31
               STR
1.33
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34
         48120 SEA FILE-REGISTRY SPE-ON ABB-ON 16.138/RID AND PMS/CI AND
               0>2
L38
           296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
               (L14 OR L7)
L46
           281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
        64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
L48
1.49
        40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L46 AND (L48 OR L49)
L51
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=> d que nos 180 L7 50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN

```
2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
              OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
1.9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
              SEL L10 1- RN : 3 TERMS
L11
L12
        20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L14
L15
               STR
L17
               SCR 2043
L19
        420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20
               STR
L22
        198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L27
        22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
T.28
        54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L31
               STR
L33
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34
        48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
               052
L35
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
               OR L12)
1.36
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
               OR L7 OR L12)
L38
           296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
               (I.14 OR I.7)
           281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
L46
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
L48
        40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
1.52
         5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
L53
         92433 SEA FILE=CAPLUS SPE=ON ABB=ON L36
L56
       366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
       197281 SEA FILE=CAPLUS SPE=ON ABB=ON ELECTRODE#/CW
1.66
        44983 SEA FILE=CAPLUS SPE=ON ABB=ON (DOUBLE LAYER?)/BI
L67
           341 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
L68
L69
           130 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L70
           104 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
L71
          1808 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
         17744 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L72
           126 SEA FILE=CAPLUS SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR
L73
               L72)
L74
            37 SEA FILE=CAPLUS SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
L75
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L70 AND (L71 OR L72)
L76
          349 SEA FILE=CAPLUS SPE=ON ABB=ON L71 AND L72
           25 SEA FILE=CAPLUS SPE=ON ABB=ON 1.73 AND (1.74 OR 1.75 OR 1.76)
L78
            4 SEA FILE=CAPLUS SPE=ON ABB=ON L74 AND (L75 OR L76)
L79
            2 SEA FILE=CAPLUS SPE=ON ABB=ON L75 AND L76
L80
           26 SEA FILE=CAPLUS SPE=ON ABB=ON (L77 OR L78 OR L79)
=> d que nos 183
L7
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
             3 SEA FILE=REGISTRY POLYLINK L8
L9
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN : 3 TERMS
L12
        20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
          587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L14
L15
               STR
               SCR 2043
```

```
1.19
       420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20
               STR
L22
        198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L27
        22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
L28
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L31
               STR
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L33
L34
         48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
               0>2
L35
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
               OR L12)
         112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
L36
               OR 1.7 OR 1.12)
T. 3.8
           296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
               (L14 OR L7)
L46
           281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
1.48
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
L52
          5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
         92433 SEA FILE=CAPLUS SPE=ON ABB=ON L36
L53
L56
        366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
L66
        197281 SEA FILE=CAPLUS SPE=ON ABB=ON ELECTRODE#/CW
L67
        44983 SEA FILE=CAPLUS SPE=ON ABB=ON (DOUBLE LAYER?)/BI
L68
           341 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
           130 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L69
           104 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
L70
          1808 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
L72
         17744 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L73
           126 SEA FILE=CAPLUS SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR
               L72)
L74
            37 SEA FILE=CAPLUS SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
L75
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L70 AND (L71 OR L72)
L76
          349 SEA FILE=CAPLUS SPE=ON ABB=ON L71 AND L72
L83
            12 SEA FILE=CAPLUS SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND
               L46
=> d que nos 186
L7
             50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
T. 9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN : 3 TERMS
L12
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
1.15
               STR
               SCR 2043
L19
        420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20
1.22
        198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L27
         22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
L28
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L31
               STR
L33
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34
        48120 SEA FILE-REGISTRY SPE-ON ABB-ON 16.138/RID AND PMS/CI AND
1.35
         6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
```

OR L12)

```
1.36
       112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
                OR L7 OR L12)
L38
            296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
                (L14 OR L7)
L46
           281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
L48
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
L52
          5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
L53
         92433 SEA FILE=CAPLUS SPE=ON ABB=ON L36
L56
        366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
1.66
        197281 SEA FILE=CAPLUS SPE=ON ABB=ON ELECTRODE#/CW
        44983 SEA FILE=CAPLUS SPE=ON ABB=ON (DOUBLE LAYER?)/BI
341 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
1.67
1.68
1.69
           130 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L70
           104 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
1.71
          1808 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
         17744 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L72
           126 SEA FILE=CAPLUS SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR
L73
                L72)
1.74
            37 SEA FILE=CAPLUS SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
L75
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L70 AND (L71 OR L72)
L76
           349 SEA FILE=CAPLUS SPE=ON ABB=ON L71 AND L72
L86
           60 SEA FILE=CAPLUS SPE=ON ABB=ON L35 AND (L73 OR L74 OR L75 OR
                L76)
=> s 158,155,151,180,183,186
L91
          106 (L58 OR L55 OR L51 OR L80 OR L83 OR L86)
=> s 191 and patent/dt
       7122492 PATENT/DT
1.92
          102 L91 AND PATENT/DT
=> s 191 not 192
L93
            4 L91 NOT L92
=> s 192 and (pd<20031024 or ad<20031024 or prd<20031024)
      23942190 PD<20031024
                 (PD<20031024)
       4765631 AD<20031024
                 (AD<20031024)
       4238406 PRD<20031024
                 (PRD<20031024)
L94
            60 L92 AND (PD<20031024 OR AD<20031024 OR PRD<20031024)
=> s 193,194
           64 (I.93 OR I.94)
1.95
=> d ibib abs hitind hitstr 195 1-64; fil hom
L95 ANSWER 1 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        2009:909090 CAPLUS Full-text
DOCUMENT NUMBER:
                         152:241290
TITLE:
                        Synthesis of nano-sized core-shell acrylate latex 2ith
                        crosslinkable double-layer
                        shell
                        Zhang, Shengwen; Qiu, Teng; Cui, Jiamin; Li, Xiaoyu
AUTHOR(S):
```

School of Materials Science and Engineering, Key Laboratory for Nanomaterials, Ministry of Education,

CORPORATE SOURCE:

```
Beijing University of Chemical Technology, Beijing,
                         100029, Peop. Rep. China
                         PMSE Preprints (2009), 101, 1510-1511
SOURCE:
                         CODEN: PPMRA9; ISSN: 1550-6703
                        American Chemical Society
PUBLISHER:
DOCUMENT TYPE:
                        Journal; (computer optical disk)
LANGUAGE:
                         English
AB
     Nano-sized core-shell acrylate latex was synthesized with double -iayer shell
     by emulsion polymerization. Via an improved seed semi-continuously emulsion
     polymerization method, GMA and MAA was introduced into the middle layer and
     the outer shell, resp., and the size of the latex was controlled to be 65nm
     with the low emulsifying agent concentration (1.8%). The polymerization
     process was monitored by DLS. The coating film from the nano-emulsions was
     further characterized.
    42-7 (Coatings, Inks, and Related Products)
     Polymerization
        (emulsion; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
     Coating materials
        (impact- and water-resistant; synthesis of nano-sized core-shell
        acrylate latex 2ith crosslinkable double-
       layer shell)
     Stability
        (mech.; synthesis of nano-sized core-shell acrylate latex 2ith
       crosslinkable double-layer shell)
     Adhesion, physical
     Flexibility
     Luster
     Mechanical hardness
     Nancemulsions
     Particle size distribution
     Polymer morphology
     Viscosity
        (synthesis of nano-sized core-shell acrylate latex 2ith
       crosslinkable double-layer shell)
    Coating materials
       (water-thinned; synthesis of nano-sized core-shell acrylate latex 2ith
       crosslinkable double-layer shell)
     1207270-68-5DP, partially-hydrolyzed
     RL: NANO (Nanomaterial); PRP (Properties); SPN (Synthetic preparation);
     TEM (Technical or engineered material use); PREP (Preparation); USES
     (Uses)
        (core-shell; synthesis of nano-sized core-shell acrylate latex 2ith
       crosslinkable double-layer shell)
     1207270-68-5DP, partially-hydrolyzed
     RL: NANO (Nanomaterial); PRP (Properties); SPN (Synthetic preparation);
     TEM (Technical or engineered material use); PREP (Preparation); USES
     (Uses)
        (core-shell; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
    1207270-68-5 CAPLUS
CN
    INDEX NAME NOT YET ASSIGNED
    CM 1
     CRN 1321-74-0
     CMF C10 H10
     CCI IDS
```



CM 2

CRN 141-32-2 CMF C7 H12 O2

n-Buo-Ü-CH-CH2

CM 3

CRN 106-91-2 CMF C7 H10 O3



CM

CRN 80-62-6 CMF C5 H8 O2

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 2 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER:

2007:1159102 CAPLUS Full-text

148:451099

TITLE: Novel pigment composition and process for the preparation thereof

INVENTOR(S): Bhagwat, Madhusudan Madan; Shukla, Brajesh; Bajaj, Pushpa; Acharva, Badri Naravan; Chavan, Raosaheb

Balvantrao; Jassal, Manjit

6

PATENT ASSIGNEE(S): Jubilant Organosys Limited, India; Indian Institute of Technology

SOURCE:

Indian Pat. Appl., 17pp.

CODEN: INXXBQ Patent English

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002DE00275	A	20071005	IN 2002-DE275	20020321 <
PRIORITY APPLN. INFO.:			IN 2002-DE275	20020321 <
AB A process for the	preparat	tion of novel	l copolymers for use as	thickeners

A process for the preparation of novel copolymers for use as thickeners and/binders in textile printing comprises copolymg. (a) at least 10% by wt of one or more carboxylic acid monomer of the kind such as herein described with (b) up to 90% by wt of one or more comonomers consisting of vinyl compds. or mixts, thereof. This thickener is an alkali swellable cross-linked polymer having both hydrophilic and hydrophobic segments. The synthetic thickener is provided in the form of an emulsion polymer using processors available in the form of emulsion which also gives thickening effect.

- ICM C09B067-00
- CC 40-6 (Textiles and Fibers)
- Section cross-reference(s): 42
- Binders

Latex

Thickening agents

(novel pigment composition and process for the preparation thereof) 25212-88-8P, Ethyl acrylate-methacrylic acid copolymer

28411-49-6P, Diallyl phathalate-ethyl acrylate-methacrylic acid copolymer 30141-22-1P, Butyl acrylate-hydroxymethyl methacrvlamide-methacrvlic acid copolymer 1018957-20-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(novel pigment composition and process for the preparation thereof) 25212-88-8P, Ethyl acrylate-methacrylic acid copolymer

28411-49-6P, Diallyl phathalate-ethyl acrylate-methacrylic acid copolymer 30141-22-1P, Butyl acrylate-hydroxymethyl methacrylamide-methacrylic acid copolymer 1018957-20-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (novel pigment composition and process for the preparation thereof)

- 25212-88-8 CAPLUS RN
- CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

CM

CRN 79-41-4 CMF C4 H6 O2

RN 28411-49-6 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 1,2-di-2-propen-1-yl ester, polymer with ethyl 2-propenoate and 2-methyl-2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5

CMF C5 H8 O2

CM 2

CRN 131-17-9 CMF C14 H14 O4

CM 3

CRN 79-41-4

CMF C4 H6 O2

RN 30141-22-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4

CMF C5 H9 N O2

CM :

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

RN 1018957-20-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 1,2-di-2-propen-1-yl ester, polymer with 1,4-bis(2-ethylhexyl) (22)-2-butenedicate, ethyl 2-propencate and 2-methyl-2-propencic acid (CA INDEX NAME)

CM 1

CRN 142-16-5

CMF C20 H36 O4

Double bond geometry as shown.

CM 2

CRN 140-88-5

CMF C5 H8 O2

CM 3

CRN 131-17-9 CMF C14 H14 O4

CM 4

CRN 79-41-4 CMF C4 H6 02

Me_U_CO2H

SOURCE:

L95 ANSWER 3 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2006:446219 CAPLUS Full-text

DOCUMENT NUMBER: 144:479494

TITLE: Supercapacitor having electrode material comprising

single-wall carbon nanotubes and process for making

the same

INVENTOR(S): Liu, Tao; Kumar, Satish

PATENT ASSIGNEE(S): Georgia Tech Research Corporation, USA

U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
US 2006098389 A1 20060511 US 2003-609725 20030630 <-US 7061749 B2 20060613

PRIORITY APPLN. INFO.: US 2002-393270P P 20020701 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The invention relates to a supercapacitor, also known as an elec. double-layer capacitor or ultracapacitor, having electrode material comprising single-wall carbon nanotubes. The carbon nanotubes can be derivatized with functional groups. The electrode material is made by preparing a polymer-nanotube

suspension comprising polymer and nanotubes, forming the polymer-nanotube suspension into a polymer-nanotube composite of the desired form, carbonizing the polymer-nanotube composite to form a carbonaceous polymer-nanotube material, and activating the material. The supercapacitor includes electrode material comprising activated carbonaceous polymer-nanotube material in contact with current collectors and permeated with an electrolyte, which may be either fluid or solid. In the case of a fluid or compressible electrolyte, an electrolyte-permeable separator or spacer is interposed between the electrodes to keep the electrodes from shorting. The supercapacitor made with electrodes comprising underivatized single-wall carbon nanotubes and polymer that has been carbonized and activated appears to operate as a non-Faradaic supercapacitor.

INCL 361502000

CC 76-10 (Electric Phenomena)

ΙT Capacitor electrodes

Capacitors

(double layer; supercapacitor having electrode

material comprising single-wall carbon nanotubes and process for making)

Electrolytic capacitors

(super-; supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

Capacitor electrodes

Electrolytes

(supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinylchloride 24968-79-4, Acrylonitrile-methyl acrylate copolymer Polyacrylonitrile 27056-80-0, Acrylonitrile-itaconic acid-methyl acrylate copolymer

RL: RCT (Reactant); RACT (Reactant or reagent)

(supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

27056-80-0, Acrylonitrile-itaconic acid-methyl acrylate copolymer

RL: RCT (Reactant); RACT (Reactant or reagent)

(supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

RN 27056-80-0 CAPLUS

CN Butanedioic acid, 2-methylene-, polymer with methyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 107-13-1

CMF C3 H3 N

H 2 C --- C H -- C --- N

CM

CRN 97-65-4

CMF C5 H6 O4

но2C—СН2—СО2Н

CM 3

CRN 96-33-3 CMF C4 H6 O2

MeO_U_CH__CH2

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS

RECORD (13 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 4 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:253567 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 142:302077

TITLE: Ceramic green sheet, and its use in multilayer ceramic

electronic component and its manufacture

INVENTOR(S): Ito, Eiji; Sawada, Akemi
PATENT ASSIGNEE(S): Murata Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
JP 2005075673	A	20050324	JP 2003-306831	20030829 <	
PRIORITY APPLN. INFO.:			JP 2003-306831	20030829 <	
AP The about contains	coromic	notidor and	a bindor with orwatalli	no oido chain	

AB The sheet contains ceramic powder and a binder with crystalline side chain content 60-90 weight%. The electronic component is manufactured by mixing ceramic powder with the binder and a solvent to give a slurry, forming the slurry to green sheets, stacking and press-bonding the sheets, and firing the resulting laminate. The green sheets have improved adhesion to prevent

peeling of the electronic component. IC ICM C04B035-632

ICS H01G004-12; H01G004-30

CC 57-2 (Ceramics)

Section cross-reference(s): 76

IT Binders

Electric apparatus

(ceramic green sheet containing binder with crystalline side chain for manufacture of

multilayer ceramic electronic component)

(T Ceramic capacitors

(multilayer; ceramic green sheet containing binder with crystalline side

for manufacture of multilayer ceramic electronic component)

147026-71-9, Acrylic acid-ethyl methacrylate-stearyl methacrylate copolymer 847935-38-2, Acrylic acid-ethyl methacrylate-methyl acrylate-stearyl methacrylate copolymer 847939-40-6, Acrylic acid-ethyl methacrylate-methyl acrylate-naphthyl methacrylate copolymer 847939-42-8, Acrylic acid-ethyl methacrylate-heptadecyl methacrylate-methyl acrylate copolymer RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (binder; ceramic green sheet containing binder with crystalline side chain

for

manufacture of multilayer ceramic electronic component) 72058-59-4, Acrylic acid-ethyl methacrylate-methyl acrylate copolymer

RL: TEM (Technical or engineered material use); USES (Uses)

(binder; ceramic green sheet containing binder with crystalline side chain

manufacture of multilayer ceramic electronic component) 27756-15-6, Acrylic acid-stearyl methacrylate copolymer 147026-71-9, Acrylic acid-ethyl methacrylate-stearyl methacrylate copolymer 947939-39-2, Acrylic acid-ethyl methacrylate-methyl acrylate-stearyl methacrylate copolymer 847939-40-6, Acrylic acid-ethyl methacrylate-methyl acrylate-naphthyl methacrylate copolymer 847939-42-8, Acrylic acid-ethyl methacrylate-heptadecyl methacrylate-methyl acrylate copolymer RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(binder; ceramic green sheet containing binder with crystalline side chain for

manufacture of multilayer ceramic electronic component)

RN 27756-15-6 CAPLUS

2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 2-propenoic CN acid (CA INDEX NAME)

CM

for

CRN 32360-05-7 CMF C22 H42 O2

СМ

CRN 79-10-7 CMF C3 H4 O2



RN 147026-71-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with octadecyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

```
CM 1
    CRN 32360-05-7
    CMF C22 H42 O2
    CM 2
    CRN 97-63-2
    CMF C6 H10 O2
 H2C O
Me_U_C_OEt
    CM 3
    CRN 79-10-7
    CMF C3 H4 O2
RN 847939-38-2 CAPLUS
CN
   2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl
    2-propenoate, octadecyl 2-methyl-2-propenoate and 2-propenoic acid (9CI)
     (CA INDEX NAME)
    CM 1
    CRN 32360-05-7
    CMF C22 H42 O2
 Me- (CH2)17-0-
    CM 2
    CRN 97-63-2
    CMF C6 H10 O2
```

```
H2C 0
Me_U_U_OEt
     CM 3
    CRN 96-33-3
     CMF C4 H6 O2
 мео_Й_сн_сн2
     CM
    CRN 79-10-7
    CMF C3 H4 O2
 но_й_сн_сн2
RN 847939-40-6 CAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl
     2-propenoate, naphthalenyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)
     CM 1
     CRN 30996-20-4
     CMF C14 H12 O2
     CCI IDS
```

CM 2 CRN 97-63-2 CMF C6 H10 O2

21

```
H2C 0
Me_U_U_OEt
    CM 3
    CRN 96-33-3
    CMF C4 H6 O2
 мео_Й_сн_сн2
    CM
    CRN 79-10-7
    CMF C3 H4 O2
 но_й_сн_сн2
RN 847939-42-8 CAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with heptadecyl
     2-methyl-2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA
     INDEX NAME)
    CM 1
    CRN 6140-75-6
    CMF C21 H40 O2
               o CH2
Me (CH2)16 -0 - C - Me
    CM 2
    CRN 97-63-2
    CMF C6 H10 O2
 H2C O
Me_U_U_OEt
```

CM 3

22

CM 4

CRN 79-10-7

CMF C3 H4 O2

IT 72958-59-4, Acrylic acid-ethyl methacrylate-methyl acrylate copolymer

copolymer
RL: TEM (Technical or engineered material use); USES (Uses)

for

(binder; ceramic green sheet containing binder with crystalline side chain

manufacture of multilayer ceramic electronic component)
RN 72058-59-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 97-63-2

CMF C6 H10 O2

CM 2

CRN 96-33-3

CMF C4 H6 O2

CM :

CRN 79-10-7



L95 ANSWER 5 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:216247 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 142:289655

TITLE: Electrode layer forming material , electrode layer, its manufacture, the electrode, and electrochemical

device

INVENTOR(S): Mori, Hidekazu; Yamakawa, Masahiro
PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2005063846	A	20050310	JP 2003-293316	20030814 <		
PRIORITY APPLN. INFO.:			JP 2003-293316	20030814 <		

AB The material, especially for a battery or a capacitor, is obtained by mixing an electrode active mass with polymer particles which contains a conductive aid and a binder. The material is manufactured by mixing the conductive aid with a polymerizable monomer to obtain a monomer composition; dispersion polymerizing, emulsion polymerizing, suspension polymerizing or microsuspension polymerizing the composition in an aqueous medium to obtain polymer particles; and mixing the polymer particles with the an electrode active mass. The electrode layer is obtained by molding the above material. The electrode has the above electrode layer laminated on a conductive substrate. The device, especially a double—layer capacitor, is obtained by mixing an electrode active mass with polymer particles which contains an electrode structure, obtained by mainating or winding the above electrode, a case storing an electrolyte and the electrode structure, and a sealing body sealing the opening of the case.

IC ICM H01M004-02

ICS H01G009-00; H01G009-058; H01G009-155; H01G009-22; H01M004-04; H01M004-06: H01M004-62

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 52

IT Battery electrodes

Capacitor electrodes

(compns. and manufacture of electrode materials for batteries and double layer capacitors)

IT Carbon black, uses

RL: DEV (Device component use); USES (Uses)

(compns. and manufacture of electrode materials for batteries and double layer capacitors)

IT Capacitors

(double layer; compns. and manufacture of electrode materials for batteries and double layer capacitors)

T 7440-44-0, Activated carbon, uses

RL: DEV (Device component use); USES (Uses) (activated; compns. and manufacture of electrode materials for batteries and double layer capacitors) 7440-06-4, Platinum, uses 25036-16-2, Butyl acrylate-methacrylic acid-styrene copolymer RL: DEV (Device component use); USES (Uses) (compns. and manufacture of electrode materials for batteries and double layer capacitors) 25036-16-2, Butyl acrylate-methacrylic acid-styrene copolymer RL: DEV (Device component use); USES (Uses) (compns. and manufacture of electrode materials for batteries and double layer capacitors) 25036-16-2 CAPLUS RN CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and ethenvlbenzene (CA INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 n-Buo_U_CH_CH2 CM 2 CRN 100-42-5 CMF C8 H8 H 2 C - CH - Ph CM 3

CRN 79-41-4 CMF C4 H6 O2

CH2 Me_U_COSH

L95 ANSWER 6 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:121238 CAPLUS Full-text

DOCUMENT NUMBER: 142:199547

TITLE: Binder with good smoothness, crack resistance, and

binding properties for electrical double

layer capacitor electrodes

INVENTOR(S): Yamakawa, Masahiro; Mori, Hidekazu PATENT ASSIGNEE(S):

DOCUMENT TYPE:

LANGUAGE .

Zeon Corporation, Japan PCT Int. Appl., 24 pp. CODEN: PIXXD2

SOURCE:

Patent Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	ENT I				KIN		DATE			APPL					D	ATE		
WO	2005	01329	98		A1		2005	0210		WO 2	004-	JP11	503		2	0040	304 4	<
	W: RW:	CN, GE, LK, NO, TJ, BW, AZ, EE,	CO, GH, LR, NZ, TM, GH, BY, ES,	CR, GM, LS, OM, TN, GM, KG,	CU, HR, LT, PG, TR, KE, KZ,	CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR,	DK, IL, MA, PT, UA, MZ, TJ, HU,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US, SD, AT, IT,	EC, JP, MK, SC, UZ, SL, BE, LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,	
			TD.		BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
	18300	044	·		A C		2006			CN 2	004-	8002	1968		2	00408	304 <	<
KR	2006	05869	97 986				2006	0530		KR 2 US 2 JP 2 WO 2	007- 003-	5671 2861	19 76		A 2	0070	202 < 118 < 304 <	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- A binder consists of a copolymer with glass transition temperature ≤10° comprising (A) monomer units derived from ≥1 compound CH2:CR1COOR2, which the glass transition temperature of the homopolymer is lower than 0° and (B) monomer units derived from ≥1 compound selected from alkvl acrylates, alkvl methacrylates, aromatic vinyl compds., and α, β -unsatd. nitriles, which the glass transition temperature of the homopolymer is higher than 0° (A + B = ≥90% based on total polymers), wherein R1 = H or Me and R2 = alkyl or cycloalkyl. Thus, 2-ethylhexyl acrylate 83, acrylonitrile 15, and methacrylic acid 2% were polymerized to give a 30%-solids copolymer solution with glass transition temperature -44° and particle diameter 130 nm, aqueous ammonia solution was added therein, 12.5 parts of which (total solid content 40%) was mixed with activated charcoal powder 100, Ketjen Black 1.5, and acetylene black 3, and DN 10L CM-cellulose ammonium salt 2 parts, water was added therein (total solid content 41%), applied on an aluminum foil, dried at 80° for 30 min, and pressed to give an electrode, which was fabricated into a capacitor, showing surface roughness 1.4 um, peel strength 0.1 N/cm, internal resistance 3.3 Ω , and good crack and electrolyte resistance.
- IC ICM H01G009-058 ICS C08F220-18
- CC 38-3 (Plastics Fabrication and Uses) Section cross-reference(s): 76
- ST binder smoothness crack resistance binding property; elec double layer capacitor electrode; ethylhexyl acrylate acrylonitrile methacrylic acid copolymer ammonium salt prepa
- IT Capacitors

(double layer; preparation of binders with good smoothness, crack resistance, and binding properties for electorubes) layer capacitor electrodes)

IT Binders

Electrodes

```
(preparation of binders with good smoothness, crack resistance, and binding
  properties for elec. double layer capacitor
  electrodes)
Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
   (preparation of binders with good smoothness, crack resistance, and binding
  properties for elec. double layer capacitor
   electrodes)
35919-18-7P 37001-62-1P, 2-Ethylhexyl acrylate-methacrylic
acid-methyl methacrylate copolymer ammonium salt 42884-82-2F,
Butyl acrylate-methacrylic acid-methyl methacrylate copolymer ammonium
salt 53754-89-5P 53479-12-2P, 2-Ethylhexyl
acrylate-methacrylic acid-styrene copolymer ammonium salt
69572-24-39, Acrylonitrile-2-ethylhexyl acrylate-methacrylic acid
copolymer ammonium salt
RL: DEV (Device component use); IMF (Industrial manufacture); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
   (preparation of binders with good smoothness, crack resistance, and binding
  properties for elec. double layer capacitor
  electrodes)
37001-63-1P, 2-Ethylhexyl acrylate-methacrylic acid-methyl
methacrylate copolymer ammonium salt 42884-82-3P, Butyl
acrylate-methacrylic acid-methyl methacrylate copolymer ammonium salt
58479-12-2P, 2-Ethylhexyl acrylate-methacrylic acid-styrene
copolymer ammonium salt 69572-24-3P.
Acrylonitrile-2-ethylhexyl acrylate-methacrylic acid copolymer ammonium
RL: DEV (Device component use); IMF (Industrial manufacture); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
   (preparation of binders with good smoothness, crack resistance, and binding
  properties for elec. double layer capacitor
  electrodes)
37001-63-1 CAPLUS
2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and
methyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)
CM 1
CRN 25133-98-6
CMF (C11 H20 O2 . C5 H8 O2 . C4 H6 O2)x
CCI PMS
    CM 2
    CRN 103-11-7
    CMF C11 H20 O2
```

CM 3 CRN 80-62-6

TΤ

ΤТ

RN

CN

CMF C5 H8 O2

```
H2C 0
          CM 4
          CRN 79-41-4
          CMF C4 H6 O2
    CH2
 Me-U-CO2H
RN 42884-82-2 CAPLUS
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)
CN
     CM 1
     CRN 25035-69-2
     CMF (C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x
     CCI PMS
          CM 2
          CRN 141-32-2
          CMF C7 H12 O2
 п-вио_Й_сн_сн2
          CM 3
          CRN 80-62-6
          CMF C5 H8 O2
 H2C O
Me_U_U_OMe
          CM 4
          CRN 79-41-4
          CMF C4 H6 O2
```

```
Me-C-CO2H
RN 58479-12-2 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and 2-ethylhexyl
    2-propenoate, ammonium salt (CA INDEX NAME)
    CM 1
    CRN 26636-08-8
    CMF (C11 H20 O2 , C8 H8 , C4 H6 O2)x
    CCI PMS
         CM 2
         CRN 103-11-7
         CMF C11 H20 O2
 Et-CH-Bu-n
         CM 3
         CRN 100-42-5
         CMF C8 H8
H2C==CH-Ph
         CM 4
         CRN 79-41-4
         CMF C4 H6 O2
Me-C-CO2H
RN 69572-24-3 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and
    2-propenenitrile, ammonium salt (9CI) (CA INDEX NAME)
    CM 1
```

CRN 26636-10-2

CMF (C11 H20 O2 . C4 H6 O2 . C3 H3 N)x

CCI PMS

CM 2

CRN 107-13-1

CMF C3 H3 N

 $\text{H}_2\text{C} = \text{C} + \text{C} = \text{N}$

CM 3

CRN 103-11-7 CMF C11 H20 O2

CH2-0-CH-CH2

CM 4

CRN 79-41-4 CMF C4 H6 O2

Me_C_CO2H

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 7 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:392345 CAPLUS Full-text

DOCUMENT NUMBER: 140:398487

TITLE: Method for producing water-soluble acrylic binder, ceramic slurry composition, and monolithic ceramic

electronic parts

INVENTOR(S): Takata, Masachika; Kodou, Masaru; Miyazaki, Makoto;

Tanaka, Satoru

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 20040092652	A1	20040513	US	2003-703468		20031110 <
JP 2005060208	A	20050310	JP	2003-317882		20030910 <
TW 248457	В	20060201	TW	2003-92129761		20031027 <
CN 1508209	A	20040630	CN	2003-10114101		20031105 <
CN 1219014	C	20050914				
KR 2004041036	A	20040513	KR	2003-78336		20031106 <
US 20050206049	A1	20050922	US	2005-132351		20050519 <
PRIORITY APPLN. INFO.	.:		JP	2002-324798	A	20021108 <
			JP	2003-201773	A	20030725 <
			JP	2003-317882	A	20030910 <
			US	2003-703468	A3	20031110

AB A ceramic slurry composition contains a mixture of a ceramic raw material powder, a water-soluble acrylic binder and water. A reein component of the water-soluble acrylic binder has a weight average mol. weight of about 10,000 to 500,000 and an inertial square radius in water of about 100 nm or less, and the alc. content of the water-soluble acrylic binder is about 5% by weight or less when the resin content is 40% by weight The pH of the ceramic slurry composition is preferably controlled to about 8.5 to 10.

IC ICM C08K003-00

INCL 524556000

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 38, 57

IT Binders

Capacitor electrodes

Ceramic capacitors

Ceramics

(method for producing water-soluble acrylic binder, ceramic slurry composition, $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

and monolithic ceramic electronic parts)

IT 12047-27-7P, Barium titanium oxide, uses 38811-87-9P, Acrylic acid-methyl acrylate-methyl methacrylate copolymer ammonium salt 42262-65-7P, Acrylic acid-methyl acrylate copolymer ammonium salt 57167-16-9P, Acrylic acid-butyl acrylate copolymer ammonium salt 72863-11-7P, Acrylic acid-ethyl acrylate copolymer ammonium salt RL: IMF (Industrial manufacture); TEW (Technical or engineered material use); PREP (Preparation); USES (Uses)

(method for producing water-soluble acrylic binder, ceramic slurry composition,

and monolithic ceramic electronic parts)

IT 61887-40-9, Methacrylic acid-methyl acrylate copolymer ammonium salt

RL: TEM (Technical or engineered material use); USES (Uses) (method for producing water-soluble acrylic binder, ceramic slurry composition,

and monolithic ceramic electronic parts)

IT 38611-87-9F, Acrylic acid-methyl acrylate-methyl methacrylate copolymer ammonium salt 42262-65-7F, Acrylic acid-methyl acrylate copolymer ammonium salt 57167-10-9F, Acrylic acid-butyl acrylate copolymer ammonium salt 72663-313-7F, Acrylic acid-ethyl acrylate copolymer ammonium salt 72663-313-7F, Acrylic acid-ethyl acrylate copolymer ammonium salt RI: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(method for producing water-soluble acrylic binder, ceramic slurry composition.

and monolithic ceramic electronic parts)

RN 38811-87-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

```
CRN 27155-22-2
    CMF (C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x
    CCI PMS
        CM 2
         CRN 96-33-3
         CMF C4 H6 O2
 Me 0_U_CH__CH2
         CM 3
         CRN 80-62-6
         CMF C5 H8 O2
 H2C OMe
         CM 4
         CRN 79-10-7
         CMF C3 H4 O2
 но_0_сн_сн2
RN 42262-65-7 CAPLUS
CN 2-Propenoic acid, polymer with methyl 2-propenoate, ammonium salt (CA
    INDEX NAME)
    CM 1
    CRN 25302-81-2
    CMF (C4 H6 O2 . C3 H4 O2)x
    CCI PMS
         CM 2
         CRN 96-33-3
         CMF C4 H6 O2
 Me 0_U_CH__CH2
```

```
CM 3
         CRN 79-10-7
         CMF C3 H4 O2
 HO_U_CH_CH2
RN 57167-10-9 CAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ammonium salt (CA
    INDEX NAME)
    CM
       1
    CRN 25119-83-9
    CMF (C7 H12 O2 . C3 H4 O2)x
    CCI PMS
         CM 2
         CRN 141-32-2
         CMF C7 H12 O2
 n-Buo_C_CH__CH2
         CM 3
         CRN 79-10-7
         CMF C3 H4 O2
RN 72863-11-7 CAPLUS
    2-Propenoic acid, polymer with ethyl 2-propenoate, ammonium salt (CA
CN
    INDEX NAME)
    CM 1
    CRN 25085-35-2
    CMF (C5 H8 O2 . C3 H4 O2)x
    CCI PMS
         CM 2
```

```
CRN 140-88-5
CMF C5 H8 O2
```

CM 3

CRN 79-10-7 CMF C3 H4 O2

IT 61887-40-9, Methacrylic acid-methyl acrylate copolymer ammonium

RL: TEM (Technical or engineered material use); USES (Uses) (method for producing water-soluble acrylic binder, ceramic slurry

composition, and monolithic ceramic electronic parts)

61887-40-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 26589-39-9

CMF (C4 H6 O2 . C4 H6 O2)x CCI PMS

CM 2

CRN 96-33-3

CMF C4 H6 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 8 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:201042 CAPLUS Full-text DOCUMENT NUMBER: 140:227491

TITLE:

Multilayer ceramic capacitors, pastes for their external electrodes, manufacture thereof, and organic

binders therefor

INVENTOR(S): Mivazaki, Makoto: Hamanaka, Kenichi

PATENT ASSIGNEE(S): Murata Mfg. Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE . Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004079480	A	20040311	JP 2002-242045	20020822 <
JP 4096661	B2	20080604		
PRIORITY APPLN. INFO.:			JP 2002-242045	20020822 <

Alkylene glycol alkyl ester (meth)acrylates 1-40, alkyl (meth)acrylates 40-99, and comonomers 0-20% are polymerized in organic solvents to give polymers of Mn 10,000-500,000, whereto elec. conductive powders (e.g., base metals) are added and dispersed to afford the title pastes. The pastes show minimized carbon residues and high viscosity and form thick electrode layers without stringiness phenomena.

ICM H01B001-22

ICS H01B013-00; H01G004-12

76-10 (Electric Phenomena) CC

Section cross-reference(s): 57

Ceramic capacitors

(multilayer; sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes)

Binders

Capacitor electrodes

Electrically conductive pastes

(sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes)

666722-41-4P, Ethyl methacrylate-methoxytriethylene glycol methacrylate copolymer 666722-42-5P 666722-43-6P, Ethyl methacrylate-2-ethylhexyl methacrylate-triethylene glycol monomethyl ether methacrylate copolymer 666722-44-7P, Ethyl methacrylate-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-45-8P, Ethyl methacrylate-methoxyoctaethylene glycol methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-47-0P 666722-48-1P, Acrylic acid-ethyl methacrylate-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 556722-49-2F, Ethyl methacrylate-methacrylic acid-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-50-5P, Ethyl methacrylate-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate-styrene copolymer 666722-51-6P, Isobutyl methacrylate-triethylene glycol monomethyl ether methacrylate copolymer RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (binders; sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes)

IT 666722-48-1P, Acrylic acid-ethyl methacrylate-triethylene glycol

```
monomethyl ether methacrylate-methyl acrylate-methyl methacrylate
    copolymer 566722-49-2P, Ethyl methacrylate-methacrylic
    acid-triethylene glycol monomethyl ether methacrylate-methyl
    acrylate-methyl methacrylate copolymer
    RL: DEV (Device component use); IMF (Industrial manufacture); TEM
    (Technical or engineered material use); PREP (Preparation); USES (Uses)
       (binders; sagging-resistant conductive pastes showing less carbon
       residue and forming thick capacitor electrodes)
    666722-48-1 CAPLUS
RN
CN
    2-Propenoic acid, 2-methyl-, ethyl ester, polymer with
    2-[2-(2-methoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate, methyl
    2-methyl-2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA
    INDEX NAME)
    CM 1
    CRN 24493-59-2
    CMF C11 H20 O5
  H2C
Me_U_U_O_CH2_CH2_O_CH2_CH2_O_CH2_OH0
    CM 2
    CRN 97-63-2
    CMF C6 H10 O2
  H2C
    CM 3
    CRN 96-33-3
    CMF C4 H6 O2
Me 0_C_CH_CH2
    CM 4
    CRN 80-62-6
    CMF C5 H8 O2
```

Me_U_U_OMe

CM 5 CRN 79-10-7 CMF C3 H4 O2 HO_U_CH_CH2 RN 666722-49-2 CAPLUS CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate, 2-[2-(2-methoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME) CM 1 CRN 24493-59-2 CMF C11 H20 O5 CM 2 CRN 97-63-2 CMF C6 H10 O2 H2C o Me_U_U_OEt CM 3 CRN 96-33-3 CMF C4 H6 O2 Me 0_ U_ CH__ CH2 CM 4 CRN 80-62-6

CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

Me-C-CO2H

L95 ANSWER 9 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:100619 CAPLUS Full-text

DOCUMENT NUMBER: 140:131173

TITLE: Electrolyte compositions for batteries and capacitors

INVENTOR(S): Nakamura, Michiei; Yoshikawa, Sachio; Takizawa, Minoru; Fujita, Toshiyasu; Doi, Seiji; Kihara,

Nobuhiro

PATENT ASSIGNEE(S): Dainichiseika Color & Chemicals Mfg. Co., Ltd., Japan SOURCE:

U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA	ATENT I				KIN	D	DATE		A	PP	LICATION NO.			DATE	
US	2004	0023			A1	_	2004	0205	U	JS	2003-624671			2003072	- 3 <
TV	7 2830	85			В		2007	0621	T	W	2003-92119927			2003072	2 <
JE	2004	1620	19		A		2004	0610	J	ΓP	2003-200256			20030723	3 <
JE	4164	005			B2		2008	1008							
E	1403	948			A2		2004	0331	E	P	2003-16544			2003072	1 <
E	1403	948			A3		2009	0401							
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT, LI, LU,	NL,	SE	, MC, PT	Γ,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR, BG, CZ,	EE,	HU	, SK	
KE	2004	0113	81		A		2004	0205	K	Œ	2003-52242			20030729	<
Cl	1 1490:	355			A		2004	0421	С	N	2003-158868			2003073) <
Ci	1 1005	4060	5		C		2009	0916							
JE	2008	2882	10		A		2008	1127	J	P	2008-149107			2008060	S <
US	2010	0036	060		A1		2010	0211	U	JS	2009-578634			2009101	1 <
PRIORIT	Y APP	LN.	INFO	. :					J	P	2002-221903		A	2002073) <
									J	P	2003-200256		A3	20030723	<
									U	IS	2003-624671		В3	20030723	3 <

AB Ion-conducting (co)polymer media and ion-conducting oligomer media close in ion conductivity to organic-solvent-based electrolytes can be produced easily and safely on industrial scale. These ion-conducting (co)polymer media use (co)polymers containing at least one cyclocarbonato group, and these ionconducting oligomer media employ oligomers containing at least two cyclocarbonato groups.

ICM H01M010-40

ICS H01G009-025

INCL 429317000; 252062200; 429307000; 361525000; 525410000

52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

Section cross-reference(s): 37, 38, 76 Capacitors

(double layer; electrolyte compns. for batteries and capacitors)

56-81-5DP, 1,2,3-Propanetriol, glycidyl derivs., polymers, reaction products with carbon dioxide 77-99-6DP, glycidyl derivs., polymers, reaction products with carbon dioxide 115-77-5DP, glycidyl derivs., polymers, reaction products with carbon dioxide 25067-05-4DP, reaction products with carbon dioxide 28472-86-8DP, reaction products with carbon dioxide 29734-45-0DF, reaction products with carbon dioxide 38811-11-9DP, reaction products with carbon dioxide 54847-49-3DP, reaction products with carbon dioxide 58782-18-6DP, reaction products with carbon dioxide 64614-28-4DP, reaction products with carbon dioxide 75503-85-4DP, reaction products with carbon dioxide 149797-02-4DP, reaction products with carbon dioxide RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrolyte cpmpns. for batteries and capacitors) 29734-45-0DP, reaction products with carbon dioxide

75503-85-4DP, reaction products with carbon dioxide

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrolyte compns. for batteries and capacitors) 29734-45-0 CAPLUS

RN

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with 2-ethylhexyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{ \hookrightarrow}_{\text{CH}_2 = \circ} = \overset{\circ}{\mathbb{L}} = \overset{\text{CH}_2}{\mathbb{L}}_{-\text{Me}}$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

RN 75503-85-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CRN 868-77-9 CMF C6 H10 O3

H2C 0 Me_ C_C_O_CH2_CH2_OH

CM 2

CRN 141-32-2 CMF C7 H12 O2

n-Buo-Ŭ-CH-CH2

CM 3

CRN 106-91-2 CMF C7 H10 O3



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L95 ANSWER 10 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:988520 CAPLUS Full-text

DOCUMENT NUMBER: 140:28391

TITLE: Polymer nanoparticle-based binder compositions for

ink-jet inks

Fu, Zhenwen; Graziano, Louis Christopher; Lein, George INVENTOR(S): Max; Hallden-Abberton, Michael Paul; Lundquist, Eric

Gustave; Devonport, Wayne

PATENT ASSIGNEE(S): Rohm and Haas Company, USA Eur. Pat. Appl., 15 pp. SOURCE: CODEN: EPXXDW

Patent DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1371697	A2	20031217	EP 2003-253676	20030611 <

```
EP 1371697
                          A3 20040102
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 20030232916
                         A1
                                20031218 US 2003-461948
                                                                20030613 <--
     US 20040063809
                          A1
                                20040401 US 2003-462110
                                                                    20030613 <--
     CN 1487042
                          Α
                                20040407 CN 2003-154511
                                                                    20030613 <--
     CN 1283739
                         C
                               20061108
     BR 2003002071
                               20040817 BR 2003-2071
                                                                    20030613 <--
                         A
                        A 20040917 BR 2003-2071
A 20040909 JP 2003-168704
B 20051021 TW 2003-92116145
A 20070906 JP 2007-155690
    JP 2004250659
                                                                    20030613 <--
                                            US 2002-414600P
US 2002-414600P
US 2002-414600P
US 2002-414600P
US 2002-414600P
US 2002-414600P
    TW 242034
                                           TW 2003-92116145
    JP 2007224318
                                            JP 2007-155690
PRIORITY APPLN. INFO.:
                                             US 2002-414600P
JP 2003-168790
                                                                A3 20030613 <--
AB
     A binder composition comprises polymeric nanoparticles (PNPs) having a mean
     diameter from 1 to 50 nm, the PNPs comprising as polymerized units 1-20%
     (based on dry polymer weight) of a curable composition unreactive at ambient
     conditions but capable of being initiated thermally, chemical or photochem.
     The binder is used in ink-jet ink compns. to improve durability of inks
     printed on paper, plastics, leather and textiles. Thus, Bu acrylate (169), Me
     methacrylate (169), trimethylolpropane triacrylate (45), methacrylic acid
     (23), and itaconic acid (45 g) were polymerized and neutralized with ammonium
     hydroxide to give a copolymer nanoparticle dispersion useful as a binder for
     ink-jet inks.
IC
     ICM C09D011-00
     ICS C08J003-07; C08F002-06; C08J003-26
    37-6 (Plastics Manufacture and Processing)
    Section cross-reference(s): 40, 42
IT
     Polyurethanes, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (acrylates, crosslinking agents; preparation of polymer
        nanoparticle binders for ink-jet inks)
    Amines, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (alkoxylated, tertiary, crosslinking agents; preparation of
        polymer nanoparticle binders for ink-jet inks)
ΤТ
    Polyoxyalkylenes, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (amino-terminated, crosslinking agents; preparation of polymer
        nanoparticle binders for ink-jet inks)
ΙT
    Binders
     Coloring materials
      Crosslinking
      Crosslinking agents
     Nanoparticles
     Pigments, nonbiological
        (preparation of polymer nanoparticle binders for ink-jet inks)
     56-81-5, Glycerol, reactions 919-30-2, 3-Triethoxysilvlpropylamine
     13822-56-5, 3-Trimethoxysilylpropylamine 64852-22-8, Jeffamine T 3000
     133687-20-4, Ucarlink XL 20 178153-95-2, CN 981 200139-08-8, Desmodur
     XP 7063 212626-19-2, Epocros K 2020E 304466-12-4, Ethox SAM 50
     RL: RCT (Reactant): RACT (Reactant or reagent)
        (crosslinking agent; preparation of polymer nanoparticle binders
        for ink-jet inks)
IT
    75-13-8D, Isocyanic acid, esters, polymers 30969-75-6D, Oxazoline,
     polymers
```

RL: RCT (Reactant); RACT (Reactant or reagent)

(crosslinking agents; preparation of polymer nanoparticle binders

for ink-jet inks) 136844-56-9P, Butyl acrylate-methacrylic acid-methyl methacrylate-trimethylolpropane triacrylate copolymer 633357-53-6P 633357-55-8P 633357-57-0P 633357-59-2F 633357-61-6P 633357-63-8P 633357-65-0P 633357-67-2P 633357-69-4P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of polymer nanoparticle binders for ink-jet inks) IT 136844-56-9P, Butvl acrylate-methacrylic acid-methyl methacrylate-trimethylolpropane triacrylate copolymer 633357-53-6P 633357-55-8P 633357-57-0P 633357-59-2P 633357-61-6P 633357-63-8P 633357-65-0P 633357-67-2P 633357-69-4P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of polymer nanoparticle binders for ink-jet inks) RN 136844-56-9 CAPLUS 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, CN 1,1'-[2-ethyl-2-[[(1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] di-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME) CM CRN 15625-89-5 CMF C15 H20 O6 0-CH2-C-Et CM 2 CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6

CMF C5 H8 02

H2C O

```
CM 4
    CRN 79-41-4
    CMF C4 H6 O2
Me_U_CO2H
    633357-53-6 CAPLUS
CN
    Butanedioic acid, methylene-, polymer with butyl 2-propenoate,
    2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate,
    methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, ammonium salt
    (9CI) (CA INDEX NAME)
    CM
        1
    CRN 633357-52-5
    CMF (C15 H20 O6 . C7 H12 O2 . C5 H8 O2 . C5 H6 O4 . C4 H6 O2)x
    CCI PMS
         CM
              2
         CRN 15625-89-5
         CMF C15 H20 O6
         Ц
           -0-CH2-C-Et
                   LH2_0_CH_CH_CH2
         CM 3
         CRN 141-32-2
         CMF C7 H12 O2
n-Buo_C_CH__CH2
         CM
```

CRN 97-65-4 CMF C5 H6 O4

CRN 80-62-6 CMF C5 H8 O2

CM

CRN 79-41-4 CMF C4 H6 O2

RN 633357-55-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-54-7

CMF (C15 H20 O6 , C7 H12 O2 , C5 H8 O2 , C4 H7 N O2 , C4 H6 O2)x

CCI PMS

CM

2 CRN 15625-89-5

CMF C15 H20 O6

CM 3

CRN 924-42-5

CMF C4 H7 N O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM !

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-57-0 CAPLUS
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester,

polymer with butyl 2-propenoate, 2-ethyl-2-[([-amethyl-2-propeny]).oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoate acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-56-9

CMF (C15 H20 O6 . C10 H14 O5 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x CCI PMS

CM 2

CRN 21282-97-3

CMF C10 H14 O5

CM 3

CRN 15625-89-5 CMF C15 H20 O6

CH2-O-CH2-CH2 H2C-CH-C-O-CH2-L-Et O CH2-O-CH2-CH2-CH2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

H2C 0

CM 6

CRN 79-41-4

CMF C4 H6 O2

CH2 Me_U_CO2H RN 633357-59-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM

CRN 633357-58-1

CMF (C15 H20 O6 . C7 H12 O2 . C7 H10 O3 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15625-89-5

CMF C15 H20 O6

CM 3

CRN 141-32-2

CMF C7 H12 O2

CM 4

CRN 106-91-2

CMF C7 H10 O3

$$\overset{\circ}{ \hookrightarrow}_{\text{CH}_2-\circ} = \overset{\circ}{\mathbb{L}} = \overset{\text{CH}_2}{\mathbb{L}}_{-\text{Me}}^{\text{CH}_2}$$

CM 5

CRN 80-62-6

CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CH2 Me-U-CO2H

RN 633357-61-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-cxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-60-5

CMF (C15 H20 O6 . C7 H12 O2 . C6 H11 O6 P . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 24599-21-1

CMF C6 H11 O6 P

H203PO-CH2-CH2-O-C-Me

CM 3

CRN 15625-89-5

CMF C15 H20 O6

CM 4

CRN 141-32-2

CMF C7 H12 O2

CM 5

CRN 80-62-6

CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-63-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM I

CRN 633357-62-7

CMF (C15 H20 O6 . C10 H20 O5 Si . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x CCI PMS

CM 2

CRN 15625-89-5

CMF C15 H20 O6

CRN 2530-85-0 CMF C10 H20 O5 Si

H2C 0 OMe Me—C—C—O—(CH2)3—Si—OMe

CM 4

CRN 141-32-2 CMF C7 H12 O2

п-вио_Й_сн_сн2

CM

CRN 80-62-6 CMF C5 H8 O2

H2C 0

CM (

CRN 79-41-4 CMF C4 H6 O2

Me_II_

RN 633357-65-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-[[3a, 4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-64-9

CMF (C16 H22 O3 . C15 H20 O6 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x CCI PMS

CM 2

CRN 68169-03-9

CMF C16 H22 O3 CCI IDS

.01 10

CM 3

CRN 15625-89-5 CMF C15 H20 O6

0 CH2—O—L—CH—CH2

H2C—CH—C—O—CH2—C—CH—CH2

CH2—O—C—CH—CH2—CH2

CM 4

CRN 141-32-2

CMF C7 H12 O2

n-Buo_U_CH__CH2

CM 5

CRN 80-62-6 CMF C5 H8 O2

H2C 0 Me_C_C_0

CRN 79-41-4 CMF C4 H6 O2

CH2 II Me—C—CO2H

RN 633357-67-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

2-(dimethylamino)ethyl 2-methyl-2-propenoate,

2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-66-1

CMF (C15 H20 O6 . C8 H15 N O2 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15625-89-5

CMF C15 H20 O6

CM 3

CRN 2867-47-2

CMF C8 H15 N O2

CM 4

CRN 141-32-2

CMF C7 H12 O2

CRN 80-62-6

CMF C5 H8 O2

CM

CRN 79-41-4 CMF C4 H6 O2

RN 633357-69-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-furanylmethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-68-3

CMF (C15 H20 O6 . C9 H10 O3 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM

2 CRN 15625-89-5

CMF C15 H20 O6

CM 3

CRN 3454-28-2

CMF C9 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM

CRN 80-62-6 CMF C5 H8 O2

CM

CRN 79-41-4 CMF C4 H6 O2

OS.CITING REF COUNT:

THERE ARE 14 CAPLUS RECORDS THAT CITE THIS

14 RECORD (16 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 11 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:730571 CAPLUS Full-text

DOCUMENT NUMBER: 139:253866

TITLE: Electric double-layered capacitor

using UV-curing gel type polymer electrolyte Cho, Byung-Won; Rhee, Hee-Woo; Cho, Won-Il; Kim, INVENTOR(S): Hyun-Joong; Yang, Chun-Mo; Kim, Yong-Tae

PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea

SOURCE: U.S., 10 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 6621685	B1	20030916	US 2003-339398	20030110 <
	KR 2003079325	A	20031010	KR 2002-18286	20020403 <
	JP 2003303739	A	20031024	JP 2003-34697	20030213 <
PRIOR	RITY APPLN. INFO.:			KR 2002-18286 A	20020403 <

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The present invention relates to an elec. double-layered capacitor using an UV-curing gel type polymer electrolyte. Disclosed is an elec. double-layered capacitor fabricated by inserting a UV-curing gel type polymer electrolyte having excellent characteristics of ion conductivity, adhesion to electrode, compatibility with an organic solvent electrolyte, mech. stability, permeability, and applicability to process, between electrodes. Accordingly, the present invention increases its storage capacitance, reduces selfdischarge of electricity, and decreases inner cell resistance.

ICM H01G009-00

INCL 361503000; 361508000; 361512000; 361523000; 361528000; 252062200;

429309000; 429326000

76-10 (Electric Phenomena) CC

Section cross-reference(s): 38, 72

electronic device fabrication double layer capacitor

gel polymer electrolyte

IT Fluoropolymers, uses

RL: NUU (Other use, unclassified); USES (Uses) (UV curing agent; elec. double-layered capacitor

using UV-curing gel type polymer electrolyte)

Capacitor electrodes

Capacitors

(double layer; elec. double-

layered capacitor using UV-curing gel type polymer electrolyte)

Electronic device fabrication

Fillers

Polymer electrolytes

(elec. double-layered capacitor using UV-curing gel type polymer electrolyte)

Zeolites (synthetic), uses

RL: NUU (Other use, unclassified); USES (Uses)

(filler; elec. double-layered capacitor using

UV-curing gel type polymer electrolyte)

Membranes, nonbiological

Textiles

(polymer electrolyte support; elec. double-layered capacitor using UV-curing gel type polymer electrolyte)

Polvesters, uses

RL: TEM (Technical or engineered material use); USES (Uses) (polymer electrolyte support; elec. double-layered

capacitor using UV-curing gel type polymer electrolyte)

9002-86-2, Polyvinyl chloride 9010-76-8, Acrylonitrile vinylidenechloride copolymer 9011-14-7, Polymethylmethacrylate

9011-17-0, Hexafluoropropylene vinylidene fluoride copolymer 24937-79-9,

Kynar 761 24968-79-4, Acrylonitrile methyl acrylate copolymer 25014-41-9, Polyacrylonitrile 25086-15-1, Methylmethacrylate

methacrylic acid copolymer 25721-76-0, Polyethyleneglycoldimethacrylate 26570-48-9, Polyethyleneglycoldiacrylate

```
RL: NUU (Other use, unclassified); USES (Uses)
       (UV curing agent; elec. double-Tayered capacitor
       using UV-curing gel type polymer electrolyte)
    7440-44-0, Carbon, uses
    RL: DEV (Device component use); USES (Uses)
        (capacitor electrode; elec. double-layered
       capacitor using UV-curing gel type polymer electrolyte)
    102-71-6, Triethanol amine, uses 102-82-9, Tributylamine 103-83-3,
    N-Benzyldimethylamine
    RL: CAT (Catalyst use); USES (Uses)
        (curing accelerator; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
    84-51-5, 2-Ethylanthraquinone 84-65-1, Anthraquinone 93-97-0, Benzoyl
    benzoate 119-61-9, Benzophenone, uses 120-51-4, Benzyl benzoate
    131-09-9, 2-Chloroanthraguinone 574-09-4, Ethyl benzoin ether
    947-19-3, 1-Hydroxycyclohexyl phenyl ketone 2648-61-5
    Ethanone, 2-methoxy-1,2-diphenyl- 5162-03-8, 2-Chlorobenzophenone
    5211-62-1, 2-Methoxyphenylacetone 5293-97-0, 2,2'-DichloroBenzophenone
    6175-45-7, 2,2-Diethoxyacetophenone 6652-28-4, Isopropyl benzoin ether
    6652-29-5, Benzoin phenyl ether 7473-98-5,
    2-Hydroxy-2-methyl-1-phenylpropane-1-one
                                              7783-20-2, Ammonium sulfate,
    uses 24650-42-8, 2,2-Dimethoxy-2-phenylacetophenone
    RL: NUU (Other use, unclassified); USES (Uses)
        (curing initiator; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
    121-44-8, Triethylamine, uses
    RL: MOA (Modifier or additive use); USES (Uses)
        (elec. double-layered capacitor using UV-curing gel
       type polymer electrolyte)
    1344-28-1, Alumina, uses 7631-86-9, Silica, uses 12047-27-7, Barium
    titanate (BaTiO3), uses 13463-67-7, Titanium dioxide, uses
    RL: NUU (Other use, unclassified); USES (Uses)
        (filler; elec. double-layered capacitor using
       UV-curing gel type polymer electrolyte)
    79-20-9, Methyl acetate 96-49-1, Ethylene carbonate 105-37-3, Ethyl
                105-58-8, Diethyl carbonate 141-78-6, Ethyl acetate, uses
    propionate
    554-12-1, Methyl propionate 623-53-0, Ethylmethyl carbonate
    21324-40-3, Lithium hexafluorophosphate
    RL: NUU (Other use, unclassified); USES (Uses)
        (liquid electrolyte containing; elec. double-layered
       capacitor using UV-curing gel type polymer electrolyte)
    25038-59-9, Mylar, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (polymer electrolyte support; elec. double-layered
       capacitor using UV-curing gel type polymer electrolyte)
    67-64-1, Acetone, miscellaneous 67-68-5, Dimethyl sulfoxide,
    miscellaneous 68-12-2, Dimethylformamide, miscellaneous 109-99-9,
    Tetrahydrofuran, miscellaneous 127-19-5, Dimethylacetamide 872-50-4,
    N-Methyl-2-pyrrolidone, miscellaneous
    RL: MSC (Miscellaneous)
       (solvent; elec. double-layered capacitor using
       UV-curing gel type polymer electrolyte)
    25086-15-1, Methylmethacrylate methacrylic acid copolymer
    RL: NUU (Other use, unclassified); USES (Uses)
        (UV curing agent; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
RN
    25086-15-1 CAPLUS
CN
    2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate
    (CA INDEX NAME)
```

CRN 80-62-6 CMF C5 H8 O2

CM 2

CRN 79-41-4 CMF C4 H6 O2

Me-C-CO2H

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 8 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 12 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:675815 CAPLUS Full-text

DOCUMENT NUMBER: 139:189545

TITLE: Anode components in solid capacitors, manufacturing

anode components, and solid electrolyte capacitors

using anode components thereof INVENTOR(S):

Ito, Masamitsu; Suenaga, Wataru; Moriyama, Minoru; Mivamoto, Akiko

PATENT ASSIGNEE(S): Toei Kasei Co., Ltd., Japan; Dainippon Ink and

Chemicals, Inc.; Kojundo Chemicals Laboratory Co.,

Jpn. Kokai Tokkvo Koho, 8 pp.

SOURCE: CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 20030829 JP 2002-20506 JP 2003243261 A 20020129 <--JP 2001-382316 A 20011214 <--PRIORITY APPLN. INFO.:

The title manufacturing of anode components involves (1) coating on a substrate with a powdered valve metal dispersion containing a polymer binder in a solvent and (2) sintering the coated material. The binder is (meth)acrylate-hydroxyl (meth)acrylate copolymer. The use of the copolymer binder gives the anode components flexibility in avoiding crack formation

during connection of a lead wire. IC ICM H01G009-052

ICS H01G009-00

76-10 (Electric Phenomena)

Section cross-reference(s): 38

IT Binders

(acrylic polymers; anode components in solid capacitors and manufacturing

anode components and solid electrolyte capacitors using anode components thereof)

Capacitors

(solid electrolyte; anode components in solid capacitors and manufacturing anode components and solid electrolyte capacitors using anode components thereof)

25719-51-1, Poly-2-ethylhexyl methacrylate 38702-23-7, Butyl methacrylate-2-hydroxyethyl acrylate copolymer 579523-82-3, Butyl methacrylate-2-ethylhexyl methacrylate-Placcel FM 2D copolymer RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (binder; anode components in solid capacitors and manufacturing anode components and solid electrolyte capacitors using anode components

thereof)

38702-23-7, Butyl methacrylate-2-hydroxyethyl acrylate copolymer RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (binder; anode components in solid capacitors and manufacturing anode components and solid electrolyte capacitors using anode components thereof)

38702-23-7 CAPLUS RN

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-hydroxyethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CM

CRN 97-88-1 CMF C8 H14 O2

L95 ANSWER 13 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:653264 CAPLUS Full-text

DOCUMENT NUMBER: 139:197934

TITLE:

Manufacture of powdered binders for fibers Weiler, Peter; Dietrich, Ulf; Graewe, Rene INVENTOR(S): Wacker Polymer Systems GmbH & Co. KG, Germany PATENT ASSIGNEE(S):

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
EP 1336623
                       A2
                             20030820
                                       EP 2003-2092
                                                              20030130 <--
    EP 1336623
                       A3
                             20031029
    EP 1336623
                       B1
                             20040825
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    DE 10206126
                      A1 20030904 DE 2002-10206126
                                                             20020214 <--
    US 20030155681
                       A1
                            20030821 US 2003-351200
                                                              20030123 <---
    AT 274528
                       T
                            20040915 AT 2003-2092
                                                              20030130 <--
    ES 2224081
                       T3 20050301
                                       ES 2003-2092
                                                              20030130 <--
                                                         A 20020214 <--
PRIORITY APPLN. INFO .:
                                        DE 2002-10206126
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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The title binders, useful for bonding particulate materials and fibers with improved distribution in substrates and adhesion to particles and fibers, contain additives for lowering viscosity of the binder melt. The binder compns. comprise (A) copolymer powders with Tg or melting temperature >30° obtained from (al) carboxylic acid vinyl esters, (meth)acrylate esters, dienes, olefins, vinyl aromatic monomers, and vinyl halides, and (a2) other monomers, (B) powdered compds, containing ≥2 functional groups reactive with copolymers A, and (C) powdered additives having Tg or melting temperature <150°, selected from polyesters, polyamides, poly(vinyl alc.), fatty alcs., fatty acids and esters, paraffins, etc. For example, adhesion to cotton fibers of a powder comprising acrylamide-Bu acrylate-methacrylic acid-styrene emulsion copolymer binder (preparation given) with 10% triglycidyl isocyanurate crosslinker, 10% poly(vinyl alc.) (hydrolysis degree 64%) and 0.6% Ph3PEtBr was 99%, vs. 75% for a similar binder without poly(vinvl alc.).

- ICM C08F002-44
- ICS C08J003-12; C09D005-03; C08J005-04
- CC 35-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 40
- ΙT Binders
- (manufacture of powdered binders for fibers)
- 2451-62-9, Triglycidylisocyanurate
 - RL: TEM (Technical or engineered material use); USES (Uses)
- (crosslinker; manufacture of powdered binders for fibers) IT 38637-59-1P 50658-98-5P 56867-98-2P,
 - 1,4-Cyclohexanedimethanol-Phthalic anhydride copolymer
- 582217-42-3P
 - RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 - (manufacture of powdered binders for fibers)
 - 38637-59-1P 56658-98-5P 582217-42-3P
- RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 - (manufacture of powdered binders for fibers) 38637-59-1 CAPLUS
- RN
- CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenvlbenzene and 2-oxiranvlmethvl 2-methvl-2-propenoate (CA INDEX NAME)
 - CM 1
 - CRN 141-32-2
 - CMF C7 H12 O2



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CM 2
     CRN 106-91-2
     CMF C7 H10 O3
     CM 3
     CRN 100-42-5
     CMF C8 H8
 H2C==CH-Ph
     CM 4
     CRN 79-41-4
CMF C4 H6 O2
     CH2
 Me-C-CO2H
RN 50658-98-5 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
ethenylbenzene and 2-propenamide (CA INDEX NAME)
     CM 1
     CRN 141-32-2
     CMF C7 H12 O2
 п-вио_Й_сн_сн2
     CM 2
     CRN 100-42-5
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CMF C8 H8

```
H2C CH-Ph
    CM 3
    CRN 79-41-4
    CMF C4 H6 O2
    CH2
 Me-C-CO2H
    CM
    CRN 79-06-1
    CMF C3 H5 N O
 H2N_C_CH_CH2
    582217-42-3 CAPLUS
RN
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
     ethenylbenzene, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic
    acid, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)
    CM 1
    CRN 15214-89-8
    CMF C7 H13 N O4 S
 ме- с- сн2- возн
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CM 3
   CRN 100-42-5
   CMF C8 H8
H2C=CH-Ph
   CM 4
   CRN 79-41-4
   CMF C4 H6 O2
Me-C-CO2H
   CM 5
   CRN 79-10-7
   CMF C3 H4 O2
HO-C-CH-CH2
   CM 6
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H2N-C-CH-CH2

CRN 79-06-1 CMF C3 H5 N O

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

LOS ANSWER 14 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:317703 CAPLUS <u>Full-text</u>
DOCUMENT NUMBER: 138:324070
TITLE: Electrode binder and electrode for electrochemistry device

INVENTOR(S): Ueno, Yoshiyuki; Murahashi, Tomoyuki; Yamada,
Katsunori

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003123766	A	20030425	JP 2001-321332	20011019 <
PRIORITY APPLN. INFO.:			JP 2001-321332	20011019 <

AB The binder is an aqueous dispersion containing a vinyl copolymer, having structure units derived from a F containing monomer, and water dispersible vinyl copolymer. The binder may also contain a water soluble polymer. Electrodes, prepared from electrode material dispersions containing the binder, are used for primary and secondary batteries and double layer capacitors.

IC ICM H01M004-62

ICS C08L057-08; C08L101-14; H01G009-04; H01G009-042; H01G009-058; H01M004-02; H01M004-24; H01M004-58; H01M004-60; H01M006-16; H01M010-40

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 76

ST battery electrode binder vinyl copolymer compn; double

layer capacitor electrode binder vinyl copolymer

IT Battery electrodes

(binders containing water dispersible vinyl copolymers and fluoro containing $% \left(1\right) =\left(1\right) \left(1$

vinyl copolymers for battery electrodes)

IT Capacitors

(double layer; binders containing water dispersible

vinyl copolymers and fluoro containing vinyl copolymers for double layer capacitor electrodes)

IT 7440-44-0, Carbon, uses

RL: DEV (Device component use); USES (Uses)

(activated; binders containing water dispersible vinyl copolymers and fluoro containing vinyl copolymers for double layer

capacitor electrodes)

9004-67-5P, Methyl cellulose 421766-50-9P 421766-51-0P

421766-53-2P 512206-56-3P 512206-57-4P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(binders containing water dispersible vinyl copolymers and fluoro containing

vinyl copolymers for battery and capacitor electrodes)

IT 421766-51-0P 421766-53-2P 512206-56-3P

512206-57-4P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(binders containing water dispersible vinyl copolymers and fluoro containing

vinyl copolymers for battery and capacitor electrodes)

RN 421766-51-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, methyl 2-methyl-2-propenoate and pentacosafluorododecyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 421766-49-6

CMF C16 H5 F25 O2

RN 421766-53-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CH2 II Me—U—CO2H

```
CRN 115-23-1
    CMF C8 H5 F9 O2
    CM 2
    CRN 97-88-1
    CMF C8 H14 O2
n-Buo_CH2
    CM 3
    CRN 80-62-6
    CMF C5 H8 O2
H2C 0
Me_U_U_OMe
    CM 4
    CRN 79-41-4
    CMF C4 H6 O2
Me_U_C_CO2H
RN 512206-56-3 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene,
    heptadecafluorooctyl 2-methyl-2-propenoate and methyl
    2-methyl-2-propenoate (9CI) (CA INDEX NAME)
    CM 1
```

CRN 15498-46-1 CMF C12 H5 F17 O2

CRN 106-99-0

CMF C4 H6

H2C-CH-CH-CH2

CM 3

CRN 100-42-5

CMF C8 H8

H2C == CH=Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4

CMF C4 H6 O2

RN 512206-57-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 115-23-1

CMF C8 H5 F9 O2

CM 2

CRN 106-99-0 CMF C4 H6

H 2 C CH CH CH CH 2

CM 3

CRN 100-42-5 CMF C8 H8

H2C-CH-Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

H2C OMe

CM 5

CRN 79-41-4 CMF C4 H6 O2

CH2 Me_U_CO2H

DOCUMENT NUMBER: TITLE:

L95 ANSWER 15 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:239912 CAPLUS Full-text 138:256637

Water-thinned paints with good film-forming property

and low tackiness containing core-shell binder

emulsions

Amano, Rvotaro

INVENTOR(S):

PATENT ASSIGNEE(S): S.K. Kaken Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
	2003089766 4033723	A B2	20030328 20080116	JP 2002-188857	20020628 <

PRIORITY APPLN. INFO.: JP 2001-207288 A 20010709 <--

The paints contain binder emulsions prepared by copolymn. of (A) ethylenic unsatd. monomers containing (al) heat-sensitive monomers in the presence of (B) water-dispersible resin particles containing ethylenic unsatd. monomers at a temperature higher than the lower critical solution temperature (Tc) of A homopolymers. Components A and B may have groups crosslinkable with each other. Thus, N-isopropylacrylamide (homopolymer Tc 32°) and N,N'-methylenebisacrylamide were copolymd. at 70° in the presence of Me methacrylate-2-ethylhexyl acrylate-acrylic acid copolymer emulsion to give a core-shell graft copolymer. A paint from the copolymer showed the lowest film-forming temperature 50° and afforded a waterproof tack-free laver.

C ICM C09D157-00

ICS C08F002-44; C08F291-00; C09D005-02; C09D133-24

CC 42-7 (Coatings, Inks, and Related Products)

IT Binders

(core-shell graft resin emulsions; water-thinned waterproof paints with good film-forming property containing core-shell binder emulsions)

IT 5138-18-1DP, Sulfosuccinic acid, derivs., graft polymer with acrylic

 monomers
 502697-44-1P
 502697-45-2P

 502697-46-3P
 502697-47-4P
 502697-48-5P

 502697-49-6P
 502697-50-9P
 502697-52-1P

502697-53-2P 502697-54-3P 502699-00-5P,

Acrylic acid-ethylene oxide-2-ethylhexyl

 ${\tt acrylate-N-isopropylacrylamide-methyl\ methacrylate\ graft\ copolymer\ sulfate\ ammonium\ salt}$

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell; water-thinned waterproof paints with good film-forming property containing core-shell binder emulsions)

IT 502697-44-1P 502697-45-2P 502697-46-3P 502697-47-4P 502697-49-5P 502697-50-9P 502697-52-1P 502697-53-2P 502697-54-3P

502699-00-5P, Acrylic acid-ethylene oxide-2-ethylhexyl

 ${\tt acrylate-N-isopropylacrylamide-methyl\ methacrylate\ graft\ copolymer\ sulfate\ ammonium\ salt}$

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell; water-thinned waterproof paints with good film-forming property containing core-shell binder emulsions)

RN 502697-44-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoide, N,N'-methylenebis[2-propenoide], N-(1-methylenebis[2-propenoide], N-(1-methylenebis[2-propenoide])

INDEX NAME)

```
CM 1
  CRN 2210-25-5
  CMF C6 H11 N O
i-PrNH_C_CH_CH2
  CM 2
  CRN 110-26-9
  CMF C7 H10 N2 O2
  CM 3
  CRN 103-11-7
  CMF C11 H20 O2
  çн2—о—Й—сн<u></u>сн2
Et-CH-Bu-n
  CM 4
  CRN 80-62-6
  CMF C5 H8 O2
H2C OMe
 CM 5
  CRN 79-10-7
  CMF C3 H4 O2
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но_й_сн_сн2

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502697-45-2 CAPLUS
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CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, 2-propenoic acid and α -sulfo- ω -[4-nony1-2-(1-propeny1)phenoxy]poly(oxy-1,2ethanediyl) ammonium salt, graft (9CI) (CA INDEX NAME)

CM 1

CRN 140651-97-4

CMF (C2 H4 O)n C18 H28 O4 S . H3 N

CCI PMS

■ NH3

CRN 2210-25-5

CMF C6 H11 N O

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM

CRN 80-62-6

CMF C5 H8 O2

```
H2C 0
Me_U_C_OMe
    CM 5
    CRN 79-10-7
    CMF C3 H4 O2
 HO_U_CH_CH2
   502697-46-3 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl
     2-propencate, Latemul S 180A, N-(1-methylethyl)-2-propenamide and
    2-propenoic acid, graft (9CI) (CA INDEX NAME)
    CM 1
    CRN 113255-53-1
    CMF Unspecified
    CCI MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    CM 2
    CRN 2210-25-5
    CMF C6 H11 N O
 i-PrNH_C_CH_CH2
    CM 3
    CRN 103-11-7
    CMF C11 H20 O2
 Et_CH_Bu-n
    CM 4
    CRN 80-62-6
```

CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

но_0_сн__сн₂

RN 502697-47-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, 2-ethylhexyl 2-propenoate, N,N'-methylenebis[2-propenamide],
N-(1-methylethyl)-2-propenamide, a-[4-nonyl-2-(1-propenyl)phenyl]o-hydroxypoly(oxy-1,2-ethanediyl), 2-propenamide and 2-propenoic
acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 146847-27-0

CMF (C2 H4 O)n C18 H28 O

CCI PMS

$$Me-(CH_2)8$$
 $CH_2-CH_2-CH_2$
 $O-CH_2-CH_2$
 $O-CH_2$
 $O-CH_2$

CM 2

CRN 2210-25-5 CMF C6 H11 N O

, û

CM 3

CRN 141-32-2

CMF C7 H12 O2



CM 4

CRN 110-26-9 CMF C7 H10 N2 O2

H2C CH CH CH2 NH CH2 NH CH CH CH2 CH2

CM 5

CRN 103-11-7 CMF C11 H20 O2

CH2-0-CH-CH2
Et-CH-Bu-n

CM 6

CRN 80-62-6 CMF C5 H8 O2

H2C 0 Me_U_U_OMe

CM 7

CRN 79-10-7 CMF C3 H4 O2

HO_C_CH__CH2

CM 8 CRN 79-06-1 CMF C3 H5 N O H2N-U-CH-CH2 RN 502697-48-5 CAPLUS CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, oxirane, 2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME) CM 1 CRN 2210-25-5 CMF C6 H11 N O i-PrNH_C_CH_CH2 CM 2 CRN 141-32-2 CMF C7 H12 O2 n-Buo_U_CH__CH2 CM 3 CRN 110-26-9 CMF C7 H10 N2 O2 H2C CH CH CH2 NH CH2 NH CH CH2 CH2 CM CRN 103-11-7 CMF C11 H20 O2

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

CM 7

CRN 79-06-1 CMF C3 H5 N O

CM 8

CRN 75-21-8 CMF C2 H4 O

å

- RN 502697-50-9 CAPLUS
- CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, N,N'-methylenebis[2-propenamide],
 - N-(1-methylethyl)-2-propenamide and 2-propenoic acid, graft (9CI) (CA

```
INDEX NAME)
   CM 1
   CRN 2210-25-5
   CMF C6 H11 N O
i-PrNH_C_CH__CH2
   CM 2
   CRN 140-88-5
CMF C5 H8 O2
Eto_U_CH_CH2
  CM 3
   CRN 110-26-9
   CMF C7 H10 N2 O2
   CM 4
   CRN 103-11-7
   CMF C11 H20 O2
   çн2_о_С_сн<u>_</u>сн2
Et_CH_Bu-n
   CM 5
   CRN 80-62-6
CMF C5 H8 O2
```

CRN 79-10-7 CMF C3 H4 O2

но_0_сн_сн

RN 502697-52-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2210-25-5 CMF C6 H11 N O

1-PrNH_C_CH_CH2

CM 2

CRN 106-91-2 CMF C7 H10 O3



CM 3

CRN 103-11-7 CMF C11 H20 O2

... ...



CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2

RN 502697-53-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2873-97-4

CMF C9 H15 N O2

CM 2

CRN 2210-25-5

CMF C6 H11 N O

CM 3

RN 502697-54-3 CAPLUS

CN Hexanedioic acid, dihydrazide, polymer with

N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenoic acid (9C1) (CA INDEX NAME)

CM 1

CM 2

CRN 1071-93-8 CMF C6 H14 N4 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 502699-00-5 CAPLUS CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, oxirane and 2-propenoic acid, hydrogen sulfate (ester), graft, ammonium salt (9CI) (CA INDEX NAME) CM 1 CRN 7664-93-9 CMF H2 O4 S CM 2 CRN 502698-99-9 CMF (C11 H20 O2 . C6 H11 N O . C5 H8 O2 . C3 H4 O2 . C2 H4 O) x CCI PMS CM 3 CRN 2210-25-5 CMF C6 H11 N O i-PrNH_U_CH_CH2 CM 4 CRN 103-11-7 CMF C11 H20 O2

> CM 5 CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

но-0-сн-сн2

CM 7

CRN 75-21-8 CMF C2 H4 O

N

L95 ANSWER 16 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:736834 CAPLUS Full-text

DOCUMENT NUMBER: 137:256414

TITLE: Sheet to form a protective film for chips and process

for producing semiconductor chips INVENTOR(S): Senoo, Hideo; Sugino, Takashi; Yamazaki, Osamu

PATENT ASSIGNEE(S): Lintec Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	IENT NO.	KIND	DATE	APPLICATION NO.	DATE
US	20020137309	A1	20020926	US 2002-102583	20020320 <
US	6919262	B2	20050719		
MX	2002003032	A	20030820	MX 2002-3032	20001211 <
JP	2002280329	A	20020927	JP 2001-81226	20010321 <
JP	3544362	B2	20040721		
TW	533532	В	20030521	TW 2002-91105261	20020320 <
CN	1375866	A	20021023	CN 2002-107957	20020321 <
CN	1217406	C	20050831		
CN	1684225	A	20051019	CN 2005-10060155	20020321 <
CN	100370581	C	20080220		
EP	1852906	A2	20071107	EP 2007-16260	20020321 <
EP	1852906	A3	20090401		
	R: AT, BE, C	H, CY, I	DE, DK, ES,	FI, FR, GB, GR, IE, IT,	. LI. LU. MC.

```
NL, PT, SE, TR
    EP 1244143
                      B1
                             20080220 EP 2002-252032
                                                            20020321 <--
       R: DE, FR, GB, IT, NL, PT
    PT 1244143
                      E
                            20080311
                                      PT 2002-252032
                                                            20020321 <--
    JP 2004260190
                            20040916
                                       JP 2004-54354
                                                            20040227 <--
                       Α
    JP 4271597
                      B2
                            20090603
    US 20050184402
                      A1
                            20050825
                                      US 2005-113480
                                                            20050425 <--
    IIS 7408259
                      B2 20080805
    US 20050186762
                      A1 20050825
                                      US 2005-113481
                                                            20050425 <--
    US 7235465
                      B2 20070626
    PH 1200600121
                      A
                           20070910
                                      PH 2006-1200600121
                                                            20060227 <--
    PH 1200600122
                      A
                           20070910
                                      PH 2006-1200600122
                                                            20060227 <--
                           20080327
    JP 2008072108
                      A
                                       JP 2007-227579
                                                            20070903
    TIS 20080260982
                      A1 20081023
                                       IIS 2008-144702
                                                            20080624 <--
                                       JP 2001-81226
PRIORITY APPLN. INFO.:
                                                         A 20010321 <--
                                       PH 2002-1200200207 A3 20020320 <--
                                       US 2002-102583 A3 20020320 <--
                                                        A3 20020321 <--
                                       CN 2002-107957
                                       EP 2002-252032
                                                         A3 20020321 <--
                                        JP 2004-54354
                                                         A3 20040227
                                       US 2005-113480
                                                          A3 20050425
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The present invention provides a sheet to form a protective film for chips. which can be readily formed into a highly uniform protective film on a back surface of chip, and which, even if minute scratches are formed on the back surface of chip as a result of mech. grinding, can eliminate adverse effects resulting from the scratches. The sheet to form a protective film for chips of the present invention comprises a release sheet and a protective film forming layer formed on a detachable surface of the release sheet, wherein said protective film forming layer comprises a thermosetting or energy ravcurable component and a binder polymer component.

ICM H01L021-301

INCL 438460000

76-3 (Electric Phenomena)

Section cross-reference(s): 38

Binders

Coating materials

Crosslinking agents

Electric circuits

Polymerization

Semiconductor device fabrication

(sheet to form protective film for chips and process for producing semiconductor chips)

39278-79-0. Coronate L

RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(crosslinking agent; sheet to form protective film for chips and process for producing semiconductor chips)

183803-65-8P, Butyl acrylate-methyl methacrylate-methyl

acrylate-2-hydroxyethyl acrylate copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or

engineered material use); PREP (Preparation); PROC (Process); USES (Uses) (sheet to form protective film for chips and process for producing semiconductor chips)

171874-02-5, Butyl acrylate-methyl methacrylate-glycidyl

methacrylate-2-hydroxyethyl acrylate copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(sheet to form protective film for chips and process for producing semiconductor chips)

IT 183803-65-8P, Butyl acrylate-methyl methacrylate-methyl

acrylate-2-hydroxyethyl acrylate copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)

(sheet to form protective film for chips and process for producing

semiconductor chips)

RN 183803-65-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl

2-propenoate, 2-hydroxyethyl 2-propenoate and methyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1

CMF C5 H8 O3

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 96-33-3

CMF C4 H6 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

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171874-02-5, Butyl acrylate-methyl methacrylate-glycidyl
    methacrylate-2-hydroxyethyl acrylate copolymer
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
    (Physical process); TEM (Technical or engineered material use); PROC
    (Process); USES (Uses)
       (sheet to form protective film for chips and process for producing
       semiconductor chips)
RN
    171874-02-5 CAPLUS
    2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
CN
    2-propenoate, 2-hydroxyethyl 2-propenoate and 2-oxiranylmethyl
    2-methyl-2-propenoate (CA INDEX NAME)
    CM 1
    CRN 818-61-1
    CMF C5 H8 O3
HO_CH2_CH2_O_U_CH__CH2
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo-C-CH-CH2
    CM 3
    CRN 106-91-2
    CMF C7 H10 O3
    CM 4
    CRN 80-62-6
```

CMF C5 H8 O2



THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 2 (2 CITINGS)

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 12 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 17 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:368812 CAPLUS Full-text

DOCUMENT NUMBER: 136:357524

TITLE: Binder for electrochemical device electrode and the

electrode

INVENTOR(S): Ueno, Yoshiyuki; Murahashi, Satoshi; Yamada, Katsufumi Sanvo Chemical Industries Ltd., Japan

PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 59 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
WO 20020395	24	A1	20020516	WO 2001-JP9863	20011112 <
W: CN,	IN, KR,	US			
RW: AT,	BE, CH,	CY, DE	, DK, ES,	FI, FR, GB, GR, IE,	IT, LU, MC, NL,
PT,	SE, TR				
JP 20022561	29	A	20020911	JP 2001-324628	20011023 <
JP 3911145		B2	20070509		
US 20040062	989	A1	20040401	US 2003-415890	20030911 <
PRIORITY APPLN.	INFO.:			JP 2000-343133	A 20001110 <
				JP 2000-394467	A 20001226 <
				WO 2001-JP9863	W 20011112 <

- AR The binder is an aqueous dispersion containing a F containing water dispersible polymer and/or a vinyl polymer thickener, which can reversibly change between hydrophilic and hydrophobic at a transition temperature. The binder may also contain other water dispersible polymer. The dispersion is preferably prepared by using a polymerizable emulsifier CH2:CR1COO(AO)pAr(R2)mXAr(R3)nO(AO)qSO3M, where Ar = aromatic group, R1 = H or Me, R2 and R3 = monovalent hydrocarbon groups with >1 R2 and >1 R3 being an aromatic ring containing hydrocarbon groups, m and n = 0 or 1-5 with an average (m+n) = 1-8, X = alkylene, cycloalkylidene, aryalkylidene, O, S, sulfonyl, bistrifluoromethyl methylene, or carbonyl group, M = cation, A = C2-4 alkylene group, p, and q = 1-40 with average (p+q) = 2-80. The electrode is useful for primary and secondary batteries as well as for double layer capacitors.
- ICM H01M004-62 IC
- ICS H01M004-02; H01M004-04; H01G009-058
- 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 76
- ST battery electrode binder water dispersing polymer thickener; double layer capacitor electrode water dispersing binder
- TТ Battery electrodes

(compns. of aqueous dispersions of electrode binders for secondary lithium batteries)

Capacitors

(double laver; compns. of aqueous dispersions of

electrode binders for double layer capacitors)

IT 7440-44-0D, Carbon, activated

RL: DEV (Device component use); USES (Uses)

(compns. of aqueous dispersions of electrode binders for double layer capacitors)

IT 9003-39-8 9004-67-5, Methyl cellulose 23262-63-7 28572-98-7 29186-31-0 56793-67-0

421766-50-9 421766-51-0 421766-52-1

421766-53-2 421766-54-3 421766-55-4

RL: DEV (Device component use); USES (Uses)

(compns. of aqueous dispersions of electrode binders for electrochem. devices)

devices) IT 28262-63-7 28572-98-7 29186-31-0

56793-67-0 421766-51-0 421766-52-1 421766-53-2 421766-54-3 421766-55-4

421/66-53-2 421/66-54-3 421/66-55-4
RL: DEV (Device component use); USES (Uses)

(compns. of aqueous dispersions of electrode binders for electrochem. devices)

RN 28262-63-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM

CRN 97-88-1

CMF C8 H14 O2

CM

CRN 80-62-6 CMF C5 H8 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

RN 28572-98-7 CAPLUS

 $\hbox{CN} \qquad \hbox{2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate} \qquad \hbox{(CA)}$

INDEX NAME) CM 1 CRN 97-63-2 CMF C6 H10 O2 H2C O Me_C_C_OEt CM 2 CRN 79-41-4 CMF C4 H6 O2 CH2 Me_U_CO2H RN 29186-31-0 CAPLUS CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene and methyl 2-methyl-2-propenoate (CA INDEX NAME) CM 1 CRN 106-99-0 CMF C4 H6 H 2 C --- CH -- CH --- CH 2 CM 2 CRN 100-42-5 CMF C8 H8 H2C==CH-Ph

CM 3 CRN 80-62-6 CMF C5 H8 O2

CM 4 CRN 79-41-4 CMF C4 H6 O2

RN 421766-51-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, methyl 2-methyl-2-propenoate and pentacosafluorododecyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 421766-49-6 CMF C16 H5 F25 O2

CM 2

CRN 106-99-0

CMF C4 H6

H 2 C CH CH CH CH 2

CM 3

CRN 100-42-5 CMF C8 H8

H2C-CH-Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

H2C O Me_C_C_OMe

CRN 79-41-4 CMF C4 H6 O2

Me_UCH2

RN 421766-52-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, heptadecafluoroctyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 15498-46-1

CMF C12 H5 F17 O2

F3C- (CF2) 7-0-CH2

CM 2

CRN 100-42-5

CMF C8 H8

H2C CH-Ph

CM 3

CRN 97-88-1

CMF C8 H14 O2

n-Buo_CH2

CM 4

CRN 80-62-6

CMF C5 H8 O2

CMF C8 H5 F9 O2

CM 2

CRN 97-88-1 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2



CM 4

RN 421766-54-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9C1) (CA INDEX NAME)

CM 1

CRN 115-23-1 CMF C8 H5 F9 O2

CM 2

CRN 100-42-5 CMF C8 H8

H2C == CH=Ph

CM 3

CRN 97-88-1 CMF C8 H14 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5 CRN 79-41-4 CMF C4 H6 O2 Me-C-CO2H RN 421766-55-4 CAPLUS CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and octyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CM 1 CRN 2157-01-9 CMF C12 H22 O2 Me - (CH2) 7-0-C-C-Me CM 2 CRN 100-42-5 CMF C8 H8 H2C == CH-Ph CM 3 CRN 97-88-1 CMF C8 H14 O2 O CH2 n-BuO_U_U_Me CM 4 CRN 80-62-6

CMF C5 H8 O2

CM :

CRN 79-41-4 CMF C4 H6 02

OS.CITING REF COUNT:

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 18 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:292220 CAPLUS Full-text

3

DOCUMENT NUMBER: 136:318006

TITLE: Methacrylate polymer dielectric thin films, thin film

capacitors and preparation method thereof INVENTOR(S): Sasaki, Yorihiko; Sasaki, Makoto

SASSAKI, IOIIIIKO, SASSAKI, MAKO
PATENT ASSIGNEE(S): Alps Electric Co., Ltd., Japan
SOURCE: Jon. Kokai Tokkvo Koho, 8 po.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002118030	A	20020419	JP 2000-308372	20001006 <
PRIORITY APPLN. INFO.:			JP 2000-308372	20001006 <

AB Title films mainly comprise crosslinkable polymers obtained from alkyl methacrylates and glycidyl methacrylate. Temperature dependency of the delec. consts. of the films are controlled by copolymn. ratios of the monomers providing temp-compensated capacitors over a wide range. Thus, a composition containing 20 g crosslinkable 19:1 (mol) Me methacrylate capacity methacrylate copolymer and 2 g naphthoquinonediazido was spin-coated on a lower electrode, irradiated with a UV light using a photomask, developed to give a pattern, cured at 230° for 1 h, and an upper electrode was formed to give a dielec. thin film capacitor with thermal expansion coefficient 2.1 + 10-4/° and temperature dependency of the dielec. constant -1800 ppm/°.

IC ICM H01G004-33

ICS C08F008-12; C08F220-12; C08F220-32; H01G004-18; H01G004-30

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 38

IT Capacitors

(film; preparation of dielec. thin films and thin film capacitors) ${\tt IT} - {\tt Capacitor}$ electrodes

Dielectric films

(preparation of dielec. thin films and thin film capacitors)

19931-28-0P, Glycidyl acrylate-methyl methacrylate copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (crosslinked; preparation of dielec. thin films and thin film

29931-28-0F, Glycidyl acrylate-methyl methacrylate copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinged; preparation of dielec, thin films and thin film capacitors)

RN 29931-28-0 CAPLUS

capacitors)

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-oxiranylmethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 106-90-1 CMF C6 H8 O3



CM 2

CRN 80-62-6 CMF C5 H8 O2

L95 ANSWER 19 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2001:709762 CAPLUS Full-text

Patent

KIND

DOCUMENT NUMBER: 135:257734

TITLE: Crosslinkable polymer blends INVENTOR(S): Kohlhammer, Klaus; Hashemzadeh, Abdulmajid

PATENT ASSIGNEE(S): Wacker Polymer Systems G.m.b.H. & Co. K.-G., Germany

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE:

German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: PATENT NO.

DATE EP 1136516 A1 20010926 EP 2001-103570 20010220 <--B1 20050105 EP 1136516 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

DE 10014399 A1 20011004 DE 2000-10014399 20000323 <--

APPLICATION NO.

DATE

7. T	286521	т	20050115	λТ	2001-103570	20010220	
		1					
ES	2233506	T3	20050616	ES	2001-103570	20010220	<
US	20010034399	A1	20011025	US	2001-804495	20010312	<
US	6884837	B2	20050426				
PL	199857	B1	20081128	PL	2001-346489	20010316	<
CA	2341002	A1	20010923	CA	2001-2341002	20010319	<
CA	2341002	C	20100209				
JP	2001261986	A	20010926	JP	2001-81490	20010321	<
JP	3977602	B2	20070919				
TW	574272	В	20040201	TW	2001-90106816	20010322	<
PRIORIT	Y APPLN. INFO.:			DE	2000-10014399 A	20000323	<
ASSIGNM	ENT HISTORY FOR US	PATEN:	T AVAILABLE	IN I	LSUS DISPLAY FORMAT		

AB The title compns., useful as binders (e.g., for lamination and bonding of textiles), are aqueous dispersions or powders of polymers (glass temperature or m.p. ≥30°) from vinyl esters, (meth)acrylate esters, (di)olefins, vinyl aromatic compds., and/or vinyl halides and 0.1-50% unsatd. carboxylic acids; and copolymers from the above monomers with unsatd. functional compds. other than carboxylic acids in place of the acids. A 1:1 mixture of aqueous dispersions of 13.8:403.7:67.3:861.3 acrylamide-Bu acrylate-methacrylic acidstyrene copolymer and 99.8:298.7:647.2 Bu acrylate-qlycidyl methacrylatestyrene copolymer was spray-dried to give a powder with particle size

.apprx.25 µm, glass temperature 49°, DSC exotherm peak 182°, and gel time 20 s at 210°. Use of the products as binders for fiber moldings is exemplified.

- ICM C08G081-02
- ICS C08J003-24; D06M023-08
- 36-6 (Physical Properties of Synthetic High Polymers)
 - Section cross-reference(s): 40
- blend polymer crosslinkable binder; fiber binder polymer blend; ST reinforced plastic binder polymer blend; acrylate copolymer blend crosslinkable; methacrylic acid copolymer blend; glycidyl methacrylate copolymer blend; styrene copolymer blend
 - crosslinkable
- Polyamide fibers, miscellaneous
 - RL: MSC (Miscellaneous)

(aramid: crosslinkable polymer blends as binders for aramid fabrics)

- Alkadienes ΤТ
 - Alkenes, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(copolymers; crosslinkable polymer blends)

ΤТ Textiles

(cotton; crosslinkable polymer blends as binders for cotton fabrics)

- Binders
- (crosslipkable polymer blends as binders) Carbon fibers, miscellaneous
- RL: MSC (Miscellaneous)

(crosslinkable polymer blends as binders for carbon fibers)

Glass fibers, miscellaneous

RL: MSC (Miscellaneous)

(crosslinkable polymer blends as binders for glass fibers)

- Carboxvlic acids, uses
 - RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(dicarboxylic, unsatd., copolymers; crosslinkable polymer blends)

- Reinforced plastics
 - RL: MSC (Miscellaneous)

(fiber-reinforced; crosslinkable polymer blends as binders

for reinforced plastics)

IT Vinyl compounds, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(halo, copolymers; crosslinkable polymer blends)

IT Carboxylic acids, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(unsatd., copolymers; crosslinkable polymer blends)

IT Aromatic compounds

Vinyl compounds, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(vinyl arenes, copolymers; crosslinkable polymer blends)

IT Esters, uses RL: POF (Pol-

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(vinyl, copolymers; crosslinkable polymer blends)

IT 26429-43-3, Butyl acrylate-glycidyl methacrylate-styrene copolymer 50658-98-5, Acrylamide-butyl acrylate-methacrylic acid-styrene copolymer 51601-25-3, Butyl acrylate-methacrylic acid-N-methylolacrylamide-styrene copolymer RL: POF (Polymer in formulation); TEM (Technical or engineered material

use); USES (Uses)
(crosslinkable polymer blends)

(Crossilhadale polymer blends)

17 26428-43-3, Butyl acrylate-glycidyl methacrylate-styrene
copolymer 50658-96-5, Acrylamide-butyl acrylate-methacrylic
acid-styrene copolymer 51601-25-3, Butyl acrylate-methacrylic
acid-N-methylolacrylamide-styrene copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material
use); USES (Uses)

(crosslinkable polymer blends)

RN 26428-43-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2

CMF C7 H12 O2



CM 2

CRN 106-91-2 CMF C7 H10 O3



```
CM 3
    CRN 100-42-5
    CMF C8 H8
HoC==CH-Ph
RN 50658-98-5 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
    ethenylbenzene and 2-propenamide (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
п-вио_Й_сн_сн2
    CM 2
    CRN 100-42-5
    CMF C8 H8
H2C==CH-Ph
    CM 3
    CRN 79-41-4
    CMF C4 H6 O2
CH2
Me_U_CO2H
    CM 4
    CRN 79-06-1
    CMF C3 H5 N O
```

RN 51601-25-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

ethenylbenzene and N-(hydroxymethyl)-2-propenamide (CA INDEX NAME)

CM 1

CRN 924-42-5

CMF C4 H7 N O2

CM

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 100-42-5

CMF C8 H8

H2C==CH=Ph

CM 4

CRN 79-41-4

CMF C4 H6 O2

OS.CITING REF COUNT:

- 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
- REFERENCE COUNT:
- THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 20 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:865385 CAPLUS Fuil-text

DOCUMENT NUMBER: 134:44479

TITLE: Acrylic resins for nonaqueous-solvent binder compositions, electrodes, and secondary batteries and manufacture of electrodes

INVENTOR(S): Ito, Toshihiko; Tanaka, Masaru; Hirayama, Takao;

Nishimura, Noboru
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan; Hitachi, Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000344838	A	20001212	JP 1999-154043	19990601 <
PRIORITY APPLN. INFO.:			JP 1999-154043	19990601 <

AB The title acrylic resins comprise (A) epoxy group-containing (meth)acrylate and (B) nitrile group-containing (meth)acrylate and have glass transition temperature -30 to 25°. The title binder compns. comprise the acrylic resins dissolved or dispersed in nonaq. solvents. Optionally, the compns. comprise epoxy resins and hardening accelerators. The electrodes are manufactured by mixing the binder compns. with active mass, coating them on supports, and then removing nonaq. solvents. Preferably, the active mass is LixMnyO2 (x = 0.2-2.5; y = 0.8-1.25). Resulting electrodes are also claimed. Secondary batteries equipped with anodes and/or cathodes manufactured by above method are also claimed. The acrylic resins have good adhesion, bendability, and electrolyte resistance and resulting batteries show long cycle life, high volume energy d., and safety.

IC ICM C08F220-32

ICS C08F220-42; C08K003-22; C08L033-14; C08L033-18; C08L063-00; H01M004-02; H01M004-04; H01M004-58; H01M004-62; H01M010-40

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 38

IT Battery anodes

Battery cathodes Battery electrodes

Binders Safetv

> (epoxy- and nitrile-containing acrylic resins for nonaq.-solvent binder compns. in electrodes of secondary batteries)

IT 27274-54-0F, Acrylonitrile-butyl acrylate-glycidyl methacrylate copolymer 29437-34-1P, Acrylonitrile-butyl acrylate-ethyl acrylate copolymer 41259-37-4P, Butyl acrylate-ethyl acrylate-glycidyl methacrylate copolymer 58152-79-7P, Acrylonitrile-butyl acrylate-ethyl acrylate-glycidyl methacrylate copolymer 292145-57-4P, Acrylonitrile-butyl acrylate-2-ethylhexyl acrylate-glycidyl methacrylate copolymer RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Device) - TRW (Tebraham), respectively.

(Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (epoxy- and nitrile-containing acrylic resins for nonag.-solvent binder

compns. in electrodes of secondary batteries)

T 27274-54-6P, Acrylonitrile-butyl acrylate-glycidyl methacrylate copolymer 41259-31-4P, Butyl acrylate-ethyl acrylate-glycidyl methacrylate copolymer 58152-79-7P, Acrylonitrile-butyl

```
acrylate-ethyl acrylate-glycidyl methacrylate copolymer
    292145-57-4P, Acrylonitrile-butyl acrylate-2-ethylhexyl
    acrylate-glycidyl methacrylate copolymer
    RL: DEV (Device component use); PNU (Preparation, unclassified); PRP
     (Properties); TEM (Technical or engineered material use); PREP
    (Preparation); USES (Uses)
       (epoxy- and nitrile-containing acrylic resins for nonag.-solvent binder
       compns. in electrodes of secondary batteries)
RN
    27274-54-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl
    2-propenoate and 2-propenenitrile (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo-C-CH-CH2
    CM 2
    CRN 107-13-1
    CMF C3 H3 N
H 2 C --- C H -- C --- N
    CM 3
    CRN 106-91-2
    CMF C7 H10 O3
RN 41259-37-4 CAPLUS
    2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl
    2-propenoate and ethyl 2-propenoate (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
```

CRN 107-13-1 CMF C3 H3 N H 2 C --- CH -- C --- N CM 4 CRN 106-91-2 CMF C7 H10 O3 RN 292145-57-4 CAPLUS CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 n-Buo-Ü-CH-CH2 CM 2 CRN 107-13-1 CMF C3 H3 N H 2 C --- CH -- C --- N CM 3 CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{ \swarrow}_{\text{CH}_2_\circ_} \overset{\circ}{\mathbb{L}} \overset{\circ}{\mathbb{L}} \overset{\circ}{\mathbb{L}}^{\text{H}_2}_{\text{C_Me}}$$

CRN 103-11-7 CMF C11 H20 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ADDITOR STONE NO

D 3 mm

L95 ANSWER 21 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:741036 CAPLUS Full-text

DOCUMENT NUMBER: 133:310310

TITLE: Process of preparing curable compositions and

radiation curable compositions

Greenblatt, Garry David; Lange, Barry Clifford; Bowe, INVENTOR(S): Michael Damian; Merritt, Richard Foster; Wilczynski, Robert; Whitman, David William; Brown, Ward Thomas; Beckley, Ronald Scott; Wolfersberger, Martha Harbaugh

PATENT ASSIGNEE(S): Rohm and Haas Co., USA

SOURCE:

Eur. Pat. Appl., 22 pp. CODEN: EPXXDW

MIND DAME

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION: DAMENIE NO

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 1044991	A1 20001018	EP 2000-302820	20000404 <
EP 1044991	B1 20040211		
R: AT, BE, CH,	DE, DK, ES, FR, GI	B, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, LT,	LV, FI, RO		
US 6433098	B1 20020813	US 1999-291425	19990413 <
US 20020137857	A1 20020926		
AU 775077	B2 20040715	AU 2001-81566	20011023 <
PRIORITY APPLN. INFO.:		US 1999-291425	A 19990413 <
		US 1994-258300	B3 19940613 <
		US 1995-467685	B1 19950606 <
		US 1997-42725P	P 19970408 <
		US 1998-34924	B2 19980305 <
		US 1998-77059P	P 19980306 <
		AU 1998-59525	A3 19980325 <
		US 1998-47547	A2 19980325 <
		US 1998-212038	A2 19981215 <

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

```
The title process comprises (a) forming an oligomer from oligomerization of a
AB
     mixture of a monomer A having a functional group and a monomer B at a
     temperature 150-650°, and pressure 3-35 MPa and the pressure is high enough to
     maintain the reaction mixture in a fluid state for a residence time 0.1 s to 4
     min, and (b) reacting a modifier having ≥1 reactive mojety with the oligomer.
     where the modifier further comprises a curable group, e.g. unsatn., which is
     maintained for later crosslinking. Thus, an oligomer of 38 mol% glycidyl
     methacrylate and 62 mol% Et acrylate was prepared and esterified using 40 g
     acrylic acid in the presence of Cr 2-ethylhexanoate and solvent and heated at
     90° for 6 h to give a curable oligomer.
     ICM C08F008-00
     ICS C08C019-00
     35-8 (Chemistry of Synthetic High Polymers)
     Section cross-reference(s): 37
тт
    Adhesives
      Binders
     Films
     Inks
     Paints
        (oligomer modification for radiation curable compns. for)
     Crosslinking
        (radiochem.; oligomer modification for radiation curable compns.)
     302588-17-6P, Acrylic acid-butyl acrylate copolymer ester with
     glycidyl methacrylate 302588-18-7P, Butyl
     acrylate-2-hydroxyethyl acrylate copolymer acrylate-trimethylolpropane
     triacrylate copolymer
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (UV crosslinked; oligomer modification for radiation curable
       compns.)
     1000091-35-8P, Butyl acrylate-glycidyl acrylate copolymer
     acrylate 107634-49-1P, Butyl acrylate-glycidyl methacrylate
     copolymer acrylate 302588-15-4P, Butyl acrylate-4-hydroxybutyl
     acrylate copolymer acrylate 302588-16-5P, Butyl
     acrylate-2-hydroxyethyl acrylate copolymer acrylate
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (UV crosslinked; oligomer modification for radiation curable
        compns.)
     302588-13-2P, Ethyl acrylate-glycidyl methacrylate copolymer
ΙT
              302588-19-8P
     acrylate
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (oligomer modification for radiation curable compns.)
     25085-42-1P, Butyl acrylate-4-hydroxybutyl acrylate copolymer
     26560-36-6P, Butvl acrylate-glycidyl methacrylate copolymer
     32409-50-0P, Butyl acrylate-2-hydroxyethyl acrylate copolymer
     64171-34-2F, Butyl acrylate-glycidyl acrylate copolymer
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (oligomer; oligomer modification for radiation curable compns.)
    302588-17-6P, Acrylic acid-butyl acrylate copolymer ester with
                           302588-18-7P, Butyl
     glycidyl methacrylate
     acrylate-2-hydroxyethyl acrylate copolymer acrylate-trimethylolpropane
     triacrylate copolymer
     RL: IMF (Industrial manufacture): PREP (Preparation)
        (UV crosslinked; oligomer modification for radiation curable
       compns.)
    302588-17-6 CAPLUS
RN
CN
     2-Propenoic acid, polymer with butyl 2-propenoate,
     2-hvdroxv-3-[(2-methvl-1-oxo-2-propenvl)oxv|propvl ester (9CI) (CA INDEX
```

NAME)

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CM 1
    CRN 5919-74-4
    CMF C7 H12 O4
 но_сн<sub>2</sub>_сн_сн<sub>2</sub>_о_С Сн<sub>2</sub>
    CM 2
    CRN 25119-83-9
     CMF (C7 H12 O2 . C3 H4 O2)x
    CCI PMS
         CM
               3
         CRN 141-32-2
         CMF C7 H12 O2
         CM
         CRN 79-10-7
         CMF C3 H4 O2
 но_Й_сн_сн2
    302588-18-7 CAPLUS
RN
CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-
    propanediyl ester, polymer with butyl 2-propenoate polymer with
     2-hydroxyethyl 2-propenoate 2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 15625-89-5
    CMF C15 H20 O6
```

H2C CH_C_O_CH2_C_Et

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CM 2
    CRN 302588-16-5
    CMF (C7 H12 O2 . C5 H8 O3)x . x C3 H4 O2
         CM
              3
         CRN 79-10-7
         CMF C3 H4 O2
         CM
         CRN 32409-50-0
              (C7 H12 O2 . C5 H8 O3)x
         CMF
         CCI PMS
              CM
                    5
              CRN 818-61-1
              CMF C5 H8 O3
HO-CH2-CH2-O-Û-CH-CH2
              CM
                  6
              CRN 141-32-2
              CMF C7 H12 O2
    100091-35-8P, Butyl acrylate-glycidyl acrylate copolymer
    acrylate 107634-49-1P, Butyl acrylate-glycidyl methacrylate copolymer acrylate 302588-15-4P, Butyl acrylate-4-hydroxybutyl
    acrylate copolymer acrylate 302589-16-5P, Butyl
    acrylate-2-hydroxyethyl acrylate copolymer acrylate
    RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
    (Reactant or reagent)
       (UV crosslinked; oligomer modification for radiation curable
       compns.)
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RN

100091-35-8 CAPLUS

```
CN 2-Propenoic acid, butyl ester, polymer with oxiranylmethyl 2-propenoate,
    2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 79-10-7
    CMF C3 H4 O2
но_Й_сн_сн
    CM 2
    CRN 64171-34-2
    CMF (C7 H12 O2 . C6 H8 O3)x
    CCI PMS
         CM
              3
         CRN 141-32-2
         CMF C7 H12 O2
         CM 4
         CRN 106-90-1
         CMF C6 H8 O3
RN 107634-49-1 CAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl
    2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 79-10-7
CMF C3 H4 O2
но_Й_сн_сн2
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CM 2
    CRN 26660-36-6
    CMF (C7 H12 O2 . C7 H10 O3)x
    CCI PMS
         CM 3
         CRN 141-32-2
         CMF C7 H12 O2
 n-BuO-C-CH-CH2
         CM 4
         CRN 106-91-2
         CMF C7 H10 O3
RN 302588-15-4 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with 4-hydroxybutyl 2-propenoate,
    2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 79-10-7
    CMF C3 H4 O2
    CM 2
    CRN 25085-42-1
    CMF (C7 H12 O3 . C7 H12 O2)x
    CCI PMS
         CM 3
         CRN 2478-10-6
         CMF C7 H12 O3
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CM 4
         CRN 141-32-2
         CMF C7 H12 O2
n-Buo-Ü-CH-CH2
RN 302588-16-5 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with 2-hydroxyethyl 2-propenoate,
    2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 79-10-7
    CMF C3 H4 O2
    CM 2
    CRN 32409-50-0
    CMF (C7 H12 O2 . C5 H8 O3)x
    CCI PMS
         CM 3
         CRN 818-61-1
         CMF C5 H8 O3
HO_CH2_CH2_O_U_CH__CH2
         CM 4
         CRN 141-32-2
         CMF C7 H12 O2
```

```
n-Buo-U-CH-CH2
   302588-13-2F, Ethyl acrylate-glycidyl methacrylate copolymer
   acrylate 302588-19-8P
   RL: IMF (Industrial manufacture); PREP (Preparation)
       (oligomer modification for radiation curable compns.)
   302588-13-2 CAPLUS
   2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethyl
   2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)
   CM
   CRN 79-10-7
   CMF C3 H4 O2
но_й_сн_сн>
   CM
       2
   CRN 26591-04-8
   CMF (C7 H10 O3 . C5 H8 O2)x
   CCI PMS
        CM
             3
        CRN 140-88-5
        CMF C5 H8 O2
Eto_Ü_CH__CH2
        CM
        CRN 106-91-2
        CMF C7 H10 O3
```

RN 302588-19-8 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-hydroxyethyl 2-propenoate, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

```
CM 1
    CRN 96571-20-9
    CMF C7 H11 N O4
    CM 2
    CRN 28136-76-7
    CMF (C5 H8 O3 . C5 H8 O2)x
    CCI PMS
         CM
              3
         CRN 818-61-1
         CMF C5 H8 O3
         CM
         CRN 140-88-5
         CMF C5 H8 O2
    25085-42-1P, Butyl acrylate-4-hydroxybutyl acrylate copolymer
    26660-36-6P, Butyl acrylate-glycidyl methacrylate copolymer
    30409-50-0P, Butyl acrylate-2-hydroxyethyl acrylate copolymer
    64171-34-2P, Butyl acrylate-glycidyl acrylate copolymer
    RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
    (Reactant or reagent)
       (oligomer; oligomer modification for radiation curable compns.)
RN
    25085-42-1 CAPLUS
CN
    2-Propenoic acid, butyl ester, polymer with 4-hydroxybutyl 2-propenoate
    (CA INDEX NAME)
    CM 1
    CRN 2478-10-6
    CMF C7 H12 O3
```

HO_ (CH2)4-O_U_CH__CH2 CM 2 CRN 141-32-2 CMF C7 H12 O2 n-Buo_U_CH_CH2 RN 26660-36-6 CAPLUS CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate (CA INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 CM 2 CRN 106-91-2 CMF C7 H10 O3 RN 32409-50-0 CAPLUS CN 2-Propenoic acid, butyl ester, polymer with 2-hydroxyethyl 2-propenoate (CA INDEX NAME) CM 1 CRN 818-61-1 CMF C5 H8 O3 HO-CH2-CH2-O-Ü-CH-CH2

CRN 141-32-2 CMF C7 H12 O2

RN 64171-34-2 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-oxiranylmethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

n-Buo_U_CH__CH2

CM 2

CRN 106-90-1 CMF C6 H8 O3



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 22 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:377009 CAPLUS Full-text

DOCUMENT NUMBER: 133:18493

TITLE: Composite sheets using crossLinkable binders

and fiber sheets

INVENTOR(S): Fujimoto, Mitsuo; Watanabe, Koji; Hashimoto, Takashi

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan Jpn. Kokai Tokkyo Koho, 7 pp.

SOURCE: CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE						
PRION	JP 2000154479 RITY APPLN. INFO.:	A	20000606	JP 1998-329454 JP 1998-329454 rability, suitable for	19981119 < 19981119 <						
	substitutes, comprise (A) fiber sheets made of fine fibers having fineness \$0.3 dtex and (B) binders containing crosslinkable acrylic polymers. Thus, a sheet of polylethylene terephthalate) fiber (fineness apprx.0.06 dtex) was impregnated with a solution containing acrylic acid-acrylonitrile-2-(disopropylmaino)ethyl methacrylate-y-										
	rile-Bu acrylate-										
	in H2O, and further discoloration after	r proces	ssed to give	ethoxysilane copolymer an artificial leather Liation							
CC	ICM D06N003-04 ICS B32B005-02; B3 38-3 (Plastics Fabr			54							
ST	Section cross-refer	ence(s)	: 40	inder composite sheet;							
	acrylic polymer cro diisopropylaminoeth sheet; methacryloxy composite sheet; bu sheet; glycidyl met	sslinka yl meth trimeth tyl acr hacryla thalate	ble binder of acrylate pol oxysilane polymer of te polymer of fiber binde	composite sheet; lymer crosslinkable bir plymer crosslinkable bir er crosslinkable binder prosslinkable binder sl er composite sheet; lea	inder r heet;						
IT	(Properties); TEM ((Preparation); USES (acrylic; compos	manufa Technic (Uses) ite she	al or engine ets using c	(Polymer in formulation of material use); Picosslinkable binders and sessions with improved durable	REP nd						
IT	Binders Leather substitutes			ole binders and fiber	ilicy,						
IT		er subs		improved durability)							
	engineered material (composite sheet	use); s using	USES (Uses) crosslinka	(Properties); TEM (Tec ole binders and fiber n improved durability)	chnical or						
IT	Reinforced plastics RL: PRP (Properties (Uses) (fiber-reinforce); TEM	(Technical o	or engineered material s using crosslinkable er substitutes with imp							
IT	Polyesters, uses RL: POF (Polymer in engineered material (fiber; composit	use); e sheet	USES (Uses) s using cro	(Properties); TEM (Ted							
IT	271774-96-0P, Acryl	ic acid acrylox	-acrylonitr: ypropyltrime	ile-2-(diisopropylamino ethoxysilane copolymer							
	methacrylate-γ-metha	acrylox	ypropyltrime	viate-giycidyi ethoxysilane copolymer (Reactant); TEM (Techi	nical or						

engineered material use); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

(binder compo net; composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

IT 271774-94-39, Acrylic acid-acrylonitrile-butyl acrylate-2-(diisopropylamino)ethyl methacrylate-glycidyl

methacrylate-y-methacryloxytrimethoxysilane hydrolytic copolymer RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

IT 25038-59-9, Poly(ethylene terephthalate), uses RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(fiber; composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

271774-98-2P, Acrylonitrile-butyl acrylate-glycidyl methacrylate-y-methacryloxypropyltrimethoxysilane copolymer RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RRCT (Reactant or reagent);

USES (Uses)
(binder compo net; composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

RN 271774-98-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl 2-propenoate, 2-propenenitrile and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 2530-85-0 CMF C10 H20 O5 Si

CM

CRN 141-32-2 CMF C7 H12 O2

n-Buo_N_CH_CH

CM 3

H2C-C-N

CM 4

CRN 106-91-2 CMF C7 H10 O3

IT 271774-94-8P, Acrylic acid-acrylonitrile-butyl acrylate-2-(diisopropylamino)ethyl methacrylate-glycidyl methacrylate-ymethacryloxytrimethoxysilane hydrolytic copolymer RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

RN 271774-94-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[bis(1-methylethyl)amino]ethyl ester, polymer with butyl 2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, 2-propenenitrile, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9C1) (CA INDEX NAME)

CM 1

CRN 16715-83-6 CMF C12 H23 N O2

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 3 CRN 141-32-2 CMF C7 H12 O2 CM 4 CRN 107-13-1 CMF C3 H3 N H 2 C --- C H -- C --- N CM CRN 106-91-2 CMF C7 H10 O3 CM 6 CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 23 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000;96099 CAPLUS Full-text
DOCUMENT NUMBER: 132:125354
TITLE: Compositions for batteries with lithium ion containing electrolytes
INVENTOR(S): Mochwald, Helmut; Doetter, Gerhard; Blum, Rainer; Keller, Peter; Bauer, Stephan; Bronstert, Bernd
PATENT ASSIGNEE(S): BASF A.-G., Germany
Ger. Offen., 32 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE DE 19835615 A1 20000210 DE 1998-19835615 19980806 <--TW 480757 B 20020321 TW 1999-88113392 A1 20000217 CA 1999-2339617 19990805 <--CA 2339617 19990806 <--CA 2339617 C 20090414 WO 2000008068 A1 20000217 WO 1999-EP5702 19990806 <--W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HR, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, KG, MD, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9954206 20000228 AU 1999-54206 19990806 <--20010627 EP 1999-940163 EP 1109841 A1 19990806 <--EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <--JP 3954308 B2 20070808 T3 20021116 ES 1999-940163 19990806 <--B1 20021105 US 2001-762076 20010201 <--ES 2176017 US 6475663 PRIORITY APPLN. INFO.: DE 1998-19835615 A 19980806 <---WO 1999-EP5702 W 19990806 <---

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- AB The title composition contains (a) S1 weight% of a pigment (I) with a primary particle size of 5 nm to 100 µm, which is a solid Ia or a battery cathode active material (Ib) or a an anode active material (Ic) or a mixture of the solid Ia with the compound Ib or the compound Ic, and (b) more than 99 to 100 weight% of a polymer material (II), which comprises I to 100 weight% of a polymer or a copolymer (IIa) containing chains and/or reactive groups on the sides which are capable of crosslinking reactions thermally and/or under UV radiation, and 0 to 99 weight% at least one polymer or copolymer (IIb), which is free of reactive groups.
- IC ICM H01M004-62
- ICS H01G009-025; G01N027-406
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 38, 74
- IT Battery anodes
- Battery cathodes
 - Battery electrolytes
 - Capacitors Electrodes
 - Optical imaging devices
 - Sensors
 - Solid electrolytes
 - (compns. for batteries with lithium ion containing electrolytes)
- IT 96-49-1, Ethylene carbonate 105-58-8 1137-42-4D, 4-Hydroxybenzophenone, reaction product with lauryl
 - acrylate-dihydrodicyclopentadienyl acrylate-glycidyl
 - methacrylate-ethylhexylacrylate copolymer 9011-17-0,
 - Hexafluoropropylene-vinylidene fluoride copolymer 12190-79-3, Cobalt
 - lithium oxide colio2 21324-40-3, Lithium hexafluorophosphate
 - 249756-67-0D, Lauryl acrylate-dihydrodicyclopentadienyl
 - acrylate-qlycidyl methacrylate-ethylhexylacrylate copolymer, reaction

```
product with 4-hydroxybenzophenone
    RL: DEV (Device component use); USES (Uses)
       (compns. for batteries with lithium ion containing electrolytes)
TT
    249756-67-0D, Lauryl acrylate-dihydrodicyclopentadienyl
    acrylate-glycidyl methacrylate-ethylhexylacrylate copolymer, reaction
    product with 4-hydroxybenzophenone
    RL: DEV (Device component use); USES (Uses)
       (compns. for batteries with lithium ion containing electrolytes)
    249756-67-0 CAPLUS
RN
CN
    2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with dodecyl
    2-propenoate, 2-ethylhexyl 2-propenoate and
    3a, 4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-vl 2-propenoate (9CI)
      (CA INDEX NAME)
    CM 1
    CRN 903574-98-1
    CMF C13 H16 O2
    CCI IDS
    CM
    CRN 2156-97-0
    CMF C15 H28 O2
    CM
    CRN 106-91-2
    CMF C7 H10 O3
```

CRN 103-11-7 CMF C11 H20 O2

CH2-0-C-CH-CH2

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L95 ANSWER 24 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1999:723073 CAPLUS Full-text

DOCUMENT NUMBER: 131:338050

TITLE: Compositions suitable for electrochemical cells
INVENTOR(S): Mohwald, Helmut; Dotter, Gerhard; Blum, Rainer;
Keller, Peter; Bauer, Stephan; Brosstert, Bern

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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	9957															9990	504	<
	W:	AL,	AU,	BG,	BR,	BY,	CA,	CN,	CZ,	GE,	HU,	ID,	IL,	IN,	JP,	KR,	KZ,	
		LT,	LV,	MK,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	TR,	UA,	US,	ZA,	
		AM,	ΑZ,	KG,	MD,	ТJ,	TM											
	RW:			CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	
		PT,																
	1981							1111										
	2331							1111		CA 1	999-	2331	040		1	9990	504	<
	2331				С		2009	1110										
AU	9938				A		1999	1123										
EP	1088	007			A1		2001	0404		EP 1	999-	9208	45		1	9990	504	<
EP	1088	007			B1		2003	0226										
	R:	DE,	ES,	FR,	GB,	ΙT												
TW	4781	88			В		2002	0301		TW 1	999-	8810	7245		1	9990	504	<
JP	2002	5139	86		T		2002	0514		JP 2	000-	5471	29		1	9990	504	<
JP	3904	392			B2		2007	0411										
ES	2194	459			Т3		2003	1116		ES 1	999-	9208	45		1	9990	504	<
CN	1146	588			С		2004	0421		CN 1	999-	8082	50		1	9990	504	<
MX	2000	0107	61		A		2001	0911		MX 2	000-	1076	1		2	0001	101	<
US	6991	874			B1		2006	0131		US 2	000-	6745	41		2	0001	102	<
PRIORITY	Y APP	LN.	INFO	. :						DE 1	998-	1981	9752		A 1	9980	504	<
										WO 1	999-	EP30	28		<i>ii</i> 1	9990	504	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT AB The title compns., which do not require inert gases for processing and are

useful as electrodes, solid electrolytes, separators, etc., contain 1-99% pigments (primary particle size 5 nm-100 µm) and 99-1% polymers (1-100% polymers bearing groups crosslinkable by heat and/or UV; 99-0% polymers free from such reactive groups). A mixture of hydrophobized wollastonite 20, Me2CO 15, C3F6-CH2:CF2 copolymer (Kynarflex 2801) 6 and 300:480:120:100

dihydrodicyclopentadienyl acrylate-2-ethylhexyl acrylate-glycidyl methacrylate-lauryl acrylate copolymer 4.6 in xylene 34, and tris(2ethylhexyl) phosphate 2.8 g was coated (30 um dry basis) on a solid support at 60°, dried, and cured photochem, to give a solid electrolyte useful with LiCoO2 cathodes and graphite anodes. ICM C08F008-00 ICS H01M010-40 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42, 72

Anodes

Capacitors

Cathodes

Electrochemical cells

Pigments, nonbiological

Solid electrolytes

(compns. suitable for electrochem. cells)

9002-84-0 9002-88-4 9003-07-0 9003-53-6 24937-79-9

249756-67-0 249756-68-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for electrochem. cells)

249756-67-0 249756-68-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for electrochem. cells)

249756-67-0 CAPLUS RN

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with dodecyl 2-propenoate, 2-ethylhexyl 2-propenoate and 3a, 4, 5, 6, 7, 7a-hexahydro-4, 7-methano-1H-inden-5(or 6)-yl 2-propenoate (9CI)

(CA INDEX NAME)

CM

CRN 903574-98-1

CMF C13 H16 O2

CCI IDS





CM 2

CRN 2156-97-0

CMF C15 H28 O2



CRN 106-91-2 CMF C7 H10 O3



CRN 103-11-7 CMF C11 H20 O2

OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 25 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN 1999:392849 CAPLUS Full-text ACCESSION NUMBER ·

DOCUMENT NUMBER: 131:33836

TITLE: Battery binders, battery electrolyte slurries,

electrodes for secondary lithium batteries and the batteries

INVENTOR(S):

Maeda, Koichiro; Nakavama, Akira; Miki, Hideo; Yamamoto, Akihika

PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF DOCUMENT TYPE: Parent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 11167921	A	19990622	JP 1997-347242	19971202 <
	JP 4438102	B2	20100324		
PRIO	RITY APPLN. INFO.:			JP 1997-347242	19971202 <

The binders are crosslinked polymer particles formed by post crosslinking polymer particles containing ≤30% un-polymerized monomers. The battery electrodes are prepared from electrode slurries containing the binder, the electrode active mass, and a liquid

ICM H01M004-62

ICS H01M004-02; H01M010-40

52-2 (Electrochemical, Radiational, and Thermal Energy Technology) CC

ST lithium battery electrode crosslinked polymer binder

TT Battery electrodes

Binders

(post crosslinked polymer binders for electrode active mass slurries for secondary lithium batteries)

TT 71426-98-7

```
RL: DEV (Device component use); USES (Uses)
       (core particles for polymer binders for electrode active mass slurries
       for secondary lithium batteries)
ΤT
    34150-22-6 35919-18-7 53754-89-5
    RL: DEV (Device component use); USES (Uses)
       (crosslinked; post crosslinked polymer binders for
       electrode active mass slurries for secondary lithium batteries)
    7440-44-0, Carbon, uses 79487-16-4 226386-67-5
    RL: DEV (Device component use); USES (Uses)
       (post crosslinked polymer binders for electrode active mass
       slurries for secondary lithium batteries)
    71426-93-7
    RL: DEV (Device component use); USES (Uses)
       (core particles for polymer binders for electrode active mass slurries
       for secondary lithium batteries)
RN
    71426-98-7 CAPLUS
CN
    Butanedioic acid, 2-methylene-, polymer with 1,3-butadiene, butyl
    2-propenoate and ethenylbenzene (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
п-вио_Й_сн_сн,
    CM 2
    CRN 106-99-0
    CMF C4 H6
H 2 C --- CH -- CH --- CH 2
    CM 3
    CRN 100-42-5
    CMF C8 H8
Hoc-B-Ph
    CM 4
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CRN 97-65-4 CMF C5 H6 O4

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ного-С-сн2-со2н
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IT 79487-16-4 226886-67-5

RL: DEV (Device component use); USES (Uses) (post crosslinked polymer binders for electrode active mass

slurries for secondary lithium batteries) 79487-16-4 CAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, diethenylbenzene and 2-propenoic acid (CA INDEX NAME)

CRN 1321-74-0 CMF C10 H10 CCI IDS

2 D1-CH-CH2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6

CMF C5 H8 O2

H2C o

CM 4

CRN 79-10-7

CMF C3 H4 O2

CN 2-Butenedioic acid (22)-, polymer with 1,3-butadiene, butyl 2-propenoate, diethenylbenzene, ethenylbenzene, methylenebutanedioic acid and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0

226886-67-5 CAPLUS

CMF C10 H10 CCI IDS



2 D1-CH-CH2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



CM 4

CRN 106-99-0

CMF C4 H6

```
H 2 C --- C H --- C H 2
    CM 5
    CRN 100-42-5
    CMF C8 H8
H2C CH-Ph
    CM 6
    CRN 97-65-4
    CMF C5 H6 O4
 но2С-С-СН2-СО2Н
    CM 7
    CRN 80-62-6
    CMF C5 H8 O2
  H2C
 Me_U_U_OMe
OS.CITING REF COUNT: 1
                            THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
                             (1 CITINGS)
L95 ANSWER 26 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
                       1999:12432 CAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                       130:67258
                       Crosslinkable acrylic polymer compositions
TITLE:
                       and their uses
INVENTOR(S):
                       Lau, Willie; Finley, Maureen Joanne; Williams, Martin
                       Marion; Morris, Hal Conley
PATENT ASSIGNEE(S):
                       Rohm and Haas Company, USA
SOURCE:
                       Eur. Pat. Appl., 10 pp.
                       CODEN: EPXXDW
DOCUMENT TYPE:
                       Patent
LANGUAGE:
                       English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
               KIND DATE APPLICATION NO. DATE
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EP 885906
                         A2
                              19981223
                                         EP 1998-304464
                                                                19980605 <--
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                              19991201
    EP 885906
                        B1
                              20030212
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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    AU 9869967
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                                                                 19980609 <--
    AU 755987
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    CN 1203245
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                                                                 19980622 <--
    JP 11106437
                             19990420
    US 6225242
                       B1 20010501 US 2000-562342
                                                                 20000501 <--
    US 20010005734
                       A1 20010628
                                         US 2001-776190
                                                                20010205 <--
    US 6300409
                       B1
                             20011009
                                          US 1997-50390P
                                                            P 19970620 <--
PRIORITY APPLN. INFO.:
                                          US 1998-99312
                                                             A3 19980618 <--
                                          US 2000-562342
                                                              A3 20000501 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The composition, useful as a binder for finishing fabrics and paper to
     improved water repellency and durability, comprises (A) a polymer obtained
     from 9.5-99.9 parts ≥1 C12-40 alkyl ester (meth)acrylate, 0-90 parts ≥1 C≤15
     ethylenically unsatd. monomer, 0-90 parts ≥1 ethylenically unsatd. acid or its
     salt and 0.1-10 parts ≥1 crosslinkable monomer (such as methacrylamide and N-
     methylmethacrylamide); and (B) optionally ≥1 crosslinking agent.
    ICM C08F220-18
    TCS D06M015-263
CC
    37-6 (Plastics Manufacture and Processing)
    Section cross-reference(s): 40, 43
ST
    acrylic polymer latex finishing nonwoven fabric water repellency;
    durability crosslinkable acrylic polymer emulsion finishing
    paper
    Aminoplasts
    RL: MOA (Modifier or additive use); USES (Uses)
       (Aricel PC 6A, crosslinking agent; crosslinkable
       acrylic polymer compns. for finishing fabrics and paper to improved
       water repellency and durability)
    Nonwoven fabrics
    Paper
    Textiles
        (crosslinkable acrylic polymer compns. for)
ΙT
    Binders
      Crosslinking agents
        (crosslinkable acrylic polymer compns. for finishing fabrics
       and paper to improved water repellency and durability)
    Polymerization
        (emulsion; crosslinkable acrylic polymer compns. for
       finishing fabrics and paper to improved water repellency and
       durability)
    Polyester fibers, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
       (fabrics; crosslinkable acrylic polymer compns. for)
    9003-08-1, Cymel 303
    RL: MOA (Modifier or additive use); USES (Uses)
       (Aricel PC 6A, crosslinking agent; crosslinkable
```

acrylic polymer compns. for finishing fabrics and paper to improved

water repellency and durability)

218147-18-3P 218147-19-4P 218147-21-8P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability) 213147-18-3P 218147-19-4P 218147-21-8P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability) 218147-18-3 CAPLUS RN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl CN 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate, 2-methyl-2-propenamide and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME) CM 1 CRN 32360-05-7 CMF C22 H42 O2 CM 2 CRN 923-02-4 CMF C5 H9 N O2 Me_U_U_NH_CH2_OH



CRN 142-90-5 CMF C16 H30 O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

```
п-вио_Й_сн_сн2
    CM 5
    CRN 80-62-6
    CMF C5 H8 O2
 H2C O
Me_U_U_OMe
    CM 6
    CRN 79-41-4
    CMF C4 H6 O2
    CHo
 Me-C-CO2H
    CM 7
    CRN 79-39-0
    CMF C4 H7 N O
 H2C O NH2
RN 218147-19-4 CAPLUS
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl
CN
     2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl
     2-methyl-2-propenoate and 2-propenamide, graft (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C O
Me_U_U_NH_CH2_OH
```

132

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

RN 218147-21-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate, octadecyl 2-methyl-2-propenoate and 2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

CMF C22 H42 O2

CM 2

CRN 923-02-4 CMF C5 H9 N O2

CM 3

CRN 142-90-5 CMF C16 H30 O2

CM

CRN 141-32-2

CMF C7 H12 O2

CM

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CM 7

CRN 79-06-1 CMF C3 H5 N O

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L95 ANSWER 27 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:806721 CAPLUS Full-text

DOCUMENT NUMBER: 130:53762

TITLE: Thermally stable and moisture-curable powder-paint binder compositions

Stanssens, Dirk Armand Wim; Van Benthem, Rudolfus INVENTOR(S): Antonius Theodorus Maria; Hendriks, Patrick Herman

Marie

PATENT ASSIGNEE(S): Dsm N.V., Neth.

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 9855550 A1 19981210 WO 1998-NL320 19980602 <--W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG NL 1006251 C2 19981208 NL 1997-1006251 19970606 <--

AU 9876779 PRIORITY APPLN. INFO.: A 19981221

AU 1998-76779 NL 1997-1006251 WO 1998-NL320 19980602 <--A 19970606 <--W 19980602 <--

AB Thermally stable, moisture-curable powder paint binder composition with a Tg of 30° or a melting temperature of 30° comprises a polymer and optionally a crosslinker. At least one of these components contains a moisture-latent reactive group. The polymer is selected from the group consisting of a saturated polyester, unsatd, polyester, polyacrylate, polyurethane, polycarbonate, polybutadiene, polystyrene, polysiloxane, or a copolymer hereof. The moisture-latent reactive group is a moisture-latent amine group, a hydrolyzable silyl group, a moisture-latent alc., a moisture-latent aldehyde group or a moisture-latent ketone group.

IC TOM COPONOS-03

C ICM C09D005-03 ICS C08G063-91

CC 42-10 (Coatings, Inks, and Related Products)

IT Binders

(thermally stable and moisture-curable powder-paint binder compns.)

17 24801-88-5DP, 3-Isocyanatopropyltriethoxysilane, reaction products with

18 polyesters 26811-89-2DP, Isophthalic acid-neopentyl glycol copolymer,

18 reaction products with isocyanatopropyltriethoxysilane 26913-26-8DP,

18 Isophthalic acid-neopentyl glycol copolymer, sur, reaction products with

18 isocyanatopropyltriethoxysilane 30261-63-9DP, Glycidyl

19 methacrylate-methyl methacrylate-butyl acrylate copolymer, cyclic

18 carbonate-functional group-containing

Carbonate-Indictional group-containing RELIMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (thermally stable and moisture-curable powder-paint binder compns.) 30261-69-99F, Glycidyl methacrylate-methyl methacrylate-butyl attempts.

IT 30261-59-90F. Glycidy1 methacrylate-methy1 methacrylate-buty1
acrylate copolymer, cyclic carbonate-functional group-containing
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermally stable and moisture-curable powder-paint binder compons.)

RN 30261-69-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

n-Buo-0-CH-CH2

CM 2

CRN 106-91-2 CMF C7 H10 O3



CRN 80-62-6 CMF C5 H8 O2

H2C O

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 28 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:786159 CAPLUS Full-text

DOCUMENT NUMBER: 130:67550

TITLE: Manufacture of moldings with lightweight and good strength for building materials

INVENTOR(S): Tanaka, Koichi; Doi, Kivoto; Ueda, Kvoichi; Kodo,

Nobuhiko

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPL:	ICATION NO.	DATE	
JP 10324581	A	19981208	JP 19	997-133112	19970523	<
PRIORITY APPLN. INFO.:			JP 19	997-133112	19970523	<
35 24-3-31					and the second	A

- AB Moldings are manufactured by mixing inorg. cellular particles with binders comprising isocyanates and ≥1 compound chosen from amino resins, phenolic resins, acrylic emulsions, and/or starch, hot pressing, and drying. Thus, Shirasu balloon 100, HCHO-urea-melamine copolymer 13, U-Loid UR 4000 3, and H20 8 parts were mixed, spread in a frame, pressed at 80°, and dried at 180° to give a 9-mm thickness mat, which was left at 20° and 60% relative humidity for 1 wk to show d. 0.38 g/cm³, thickness 9.02 mm, and bending strength 221 N/cm² (at 25°) and 185 N/cm² (at 40°).
 - IC ICM C04B038-08 ICS C04B038-00
 - CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 58

IT Binders

Cellular materials

Construction materials

Lightweight materials

(manufacture of lightweight moldings containing inorg. cellular particles

polymer binders for building materials)

IT Aminoplasts

Phenolic resins, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

```
(polyisocyanate-crosslinked; manufacture of lightweight moldings
       containing inorg, cellular particles and polymer binders for building
       materials)
     200506-57-6P, Formaldehyde-phenol-U-Loid UR 4000 copolymer
     218297-79-19, Butyl acrylate-glycidyl methacrylate-methyl
     methacrylate-U-Loid UR 4000 copolymer 218297-80-4P 218297-81-5P,
     Formaldehyde-melamine-starch-urea-U-Loid UR 4000 copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (manufacture of lightweight moldings containing inorg, cellular particles
and
        polymer binders for building materials)
тт
     9003-35-4P, Formaldehyde-phenol copolymer
                                               25036-13-9P.
     Formaldehyde-melamine-urea copolymer 30261-69-9P, Butyl
     acrylate-glycidyl methacrylate-methyl methacrylate copolymer
     138981-63-2P, Formaldehyde-melamine-starch-urea copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (manufacture of lightweight moldings containing inorg, cellular particles
and
       polymer binders for building materials)
ΙT
     218297-79-1P, Butyl acrylate-glycidyl methacrylate-methyl
     methacrylate-U-Loid UR 4000 copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (manufacture of lightweight moldings containing inorg, cellular particles
and
       polymer binders for building materials)
RN
     218297-79-1 CAPLUS
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
CN
     2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and U-Loid UR 4000
     (9CI) (CA INDEX NAME)
     CM
         - 1
     CRN 97397-26-7
     CMF Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM 2
    CRN 141-32-2
     CMF C7 H12 O2
 n-Buo_C_CH__CH2
     CM 3
    CRN 106-91-2
     CMF C7 H10 O3
```

$$\overset{\circ}{ \hookrightarrow}_{\text{CH}_2-\circ} = \overset{\circ}{\text{U}} = \overset{\text{CH}_2}{\text{U}}_{-\text{Me}}$$

CRN 80-62-6 CMF C5 H8 O2



II 30261-69-9P, Butyl acrylate-glycidyl methacrylate-methyl

methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of lightweight moldings containing inorg. cellular particles

and polymer binders for building materials)

RN 30261-69-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2

CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} = \overset{\circ}{\mathbb{L}} \overset{\text{CH}_2}{\mathbb{L}}_{-\text{Me}}^{\text{CH}_2}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

L95 ANSWER 29 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:735538 CAPLUS Full-text

DOCUMENT NUMBER: 130:40968

TITLE: Polymeric binders for nonaqueous battery electrodes

INVENTOR(S): Noritake, Masayoshi; Ito, Nobuyuki

PATENT ASSIGNEE(S): JSR Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10302799	A	19981113	JP 1997-121444	19970425 <
	JP 3601250	B2	20041215		
TO	TTV ADDIN TMEO .			TD 1007-121444	10070425

PRIORITY APPLN. INFO.:

3 The binders are aqueous dispersions containing vinylidene fluoride polymers having functional groups. Use of the binders give batteries with high

performance and storage stability.

IC ICM H01M004-62 ICS C08L027-16

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 35

IT Battery electrodes

Binders

(vinylidene fluoride polymers as binders for nonaq. battery electrodes)

IT 216673-45-9P 216673-56-2P 216673-66-4P RL: DEV (Device component use); PNU (Preparation, unclassified); TEM

(Technical or engineered material use); PREP (Preparation); USES (Uses)

(vinylidene fluoride polymers as binders for nonaq. battery electrodes)

RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (vinvlidene fluoride polymers as binders for nonac, battery electrodes)

RN 216673-45-9 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, 1,1-difluoroethene, 1,1,2,3,3,3-hexafluoro-1-propene,

 ${\tt N-(hydroxymethyl)-2-propenamide,\ methyl\ 2-methyl-2-propenoate\ and}$

2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2



```
CM 7
    CRN 75-38-7
    CMF C2 H2 F2
F_U_F
RN
    216673-56-2 CAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-difluoroethene,
    ethenylbenzene, 1,1,2,3,3,3-hexafluoro-1-propene and
    N-(hydroxymethyl)-2-propenamide, graft (9CI) (CA INDEX NAME)
    CM 1
    CRN 924-42-5
    CMF C4 H7 N O2
HO- CH2-NH-U- CH2- CH2
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
 п-вио_Й_сн_сн2
    CM 3
    CRN 116-15-4
    CMF C3 F6
   CF2
 F-U-CF3
    CM 4
    CRN 100-42-5
    CMF C8 H8
```

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H2C CH-Ph
     CM 5
     CRN 79-10-7
     CMF C3 H4 O2
 HO_U_CH_CH2
     CM
           6
     CRN 75-38-7
     CMF C2 H2 F2
 F_U_F
RN
     216673-66-4 CAPLUS
CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate,
1,1-difluoroethene, 1,1,2,3,3,3-hexafluoro-1-propene, methyl
      2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and
      2-propenoic acid, graft (9CI) (CA INDEX NAME)
     CM 1
     CRN 141-32-2
CMF C7 H12 O2
 n-Buo_0_CH__CH2
     CM 2
     CRN 116-15-4
     CMF C3 F6
 F-C-CF3
```

CRN 106-91-2 CMF C7 H10 O3

CM 4

CRN 97-65-4 CMF C5 H6 O4

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

CM 7

CRN 75-38-7 CMF C2 H2 F2

$$\mathbf{F}_{\mathbf{F}} = \mathbf{U}_{\mathbf{F}}^{\mathbf{CH}_{2}}$$

OS.CITING REF COUNT: THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD 3 (3 CITINGS)

L95 ANSWER 30 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:631684 CAPLUS Full-text

DOCUMENT NUMBER: 129:253552

ORIGINAL REFERENCE NO.: 129:51461a,51464a

TITLE: Binder for dielectric ceramic material providing green

sheet with high toughness under pressure

INVENTOR(S): Sasaki, Michivuki

PATENT ASSIGNEE(S): TDK Electronics Co., Ltd., Japan; TDK Corporation

SOURCE . Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APE	PLICATION NO.	DATE
	JP 10259062	A	19980929	JΡ	1997-63620	19970317 <
	JP 3743588	B2	20060208			
RIOF	ITY APPLN. INFO.:			JΡ	1997-63620	19970317 <

AB The binder comprises a copolymer of C1-6-alkyl methacrylate, C1-6-alkyl acrylate, and a fatty acid and shows Mn 15,000-220,000, Mw 75,000-800,000, and Mw/Mn 2.0-6.7.

ICM C04B035-632

ICS C08F002-18; C09J133-12

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 38, 57

Binders Slurries

PR

(binder for dielec, ceramic material providing green sheet with high toughness under pressure)

Ceramic capacitors

(multilayer; binder for dielec. ceramic material providing green sheet with high toughness under pressure)

12047-27-7, Barium titanate, processes 26300-51-6, Acrylic

acid-butyl acrylate-methyl methacrylate copolymer

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(binder for dielec. ceramic material providing green sheet with high toughness under pressure)

ΤТ

26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(binder for dielec, ceramic material providing green sheet with high toughness under pressure)

RN 26300-51-6 CAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 141-32-2

CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 31 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:614400 CAPLUS Full-text

ACCESSION NUMBER: 1998:614400 CAPLUS Full-te
DOCUMENT NUMBER: 129:291124

ORIGINAL REFERENCE NO.: 129:59321a,59324a

TITLE: Aqueous acrylic resin compositions with excellent flexibility and water, heat, and solvent resistance

INVENTOR(S): Sato, Masaaki; Kuroume, Masanari

PATENT ASSIGNEE(S): Nippon Carbide Industries Co., Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	AP	PLICATION NO.	DA	TE	
	JP 10251474	A	1998	0922 JP	1997-69000	19	970307	<
	JP 3391649	B2	2003	0331				
PRIO	RITY APPLN. INFO.:			JP	1997-69000	19	970307	<
AB	The compns., useful	for	sizes,	coatings,	and binders,	comprise ((A) wat	er-

The compns., useful for sizes, coatings, and binders, comprise (A) water-dispersible acrylic copolymers having groups (excluding oxazoline group) reactive to oxazoline-reactive groups, (B) water-soluble or water-dispersible macromols. (excluding A) containing oxazoline-reactive groups, and (C) oxazoline-containing water-soluble macromols. Thus, blending 200 parts aqueous dispersion of 50:34.9:10:5:0.1 (%) Et acrylate (I)-Bu acrylate (II)-acrylonitrile-glycidyl methacrylate-acrylic acid copolymer (solids 50.1 %) with 23 parts 30:30:40 (%) I-II-methacrylic acid copolymer (solids 30%) and

```
12.5 parts Epocros WS 500 (solids 40%) gave a composition showing pH 7.6,
     solids 46.1%, and viscosity 3200 cP. A cotton fabric was printed with a
     textile printing paste containing the above composition, treated at 140° for
     10 min, and washed to show no damages on the printed parts.
     ICM C08L033-14
IC
     ICS C08G073-00; C08L101-02; D06M015-31
    40-9 (Textiles and Fibers)
CC
    Section cross-reference(s): 42
    oxazoline carboxyl epoxy contg acrylic size; flexibility fiber size ag
     acrylic resin; self crosslinkable acrylic resin flexible
     coating; solvent heat water resistant acrylic compn
    Binders
     Fabric finishing
     Nonwoven fabrics
     Sizes (agents)
     Textile printing
        (aqueous acrylic resin compns. with excellent flexibility and water, heat,
       and solvent resistance)
     214358-21-1P 214358-23-3P
                                 214358-25-5P
     214358-27-7P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (aqueous acrylic resin compns. with excellent flexibility and water, heat,
       and solvent resistance)
     214358-21-1P
                  214358-23-3P
                                 214358-25-5P
     214358-27-79
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (aqueous acrylic resin compns. with excellent flexibility and water, heat,
        and solvent resistance)
RN
    214358-21-1 CAPLUS
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
     4,5-dihydro-2-(1-methylethyl)oxazole, ethyl 2-propenoate, methyl
     2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate,
     2-propenenitrile and 2-propenoic acid, ammonium salt (9CI) (CA INDEX
    NAME)
    CM 1
     CRN 214358-20-0
         (C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 .
          C3 H4 O2 . C3 H3 N)x
     CCI PMS
         CM
              2
         CRN 10471-78-0
         CMF C6 H9 N O
```



CRN 141-32-2 CMF C7 H12 O2



CM 4

CRN 140-88-5 CMF C5 H8 O2

0

CM 5

CRN 107-13-1 CMF C3 H3 N

 $\text{H}_2\text{C} = \text{CH} = \text{C} = \text{N}$

CM 6

CRN 106-91-2 CMF C7 H10 O3



CM 7

CRN 80-62-6

CMF C5 H8 O2



CM 8

CRN 79-41-4 CMF C4 H6 O2

Me_U_CH2

CM 9

CRN 79-10-7 CMF C3 H4 O2

но_<mark>Й_</mark>сн**_**сн₂

RN 214358-23-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM

CRN 214358-22-2

CMF (C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 10471-78-0

CMF C6 H9 N O

CM 3

CRN 141-32-2 CMF C7 H12 O2

n-Buo_U_CH_CH2

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-41-4 CMF C4 H6 O2

CH2 Me—U—CO2H

CM 8

CRN 79-10-7 CMF C3 H4 O2

RN 214358-25-5 CAPLUS CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

4,5-dihydro-2-(1-methylethyl)oxazole, 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 214358-24-4

CMF (C11 H20 O2 . C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 10471-78-0 CMF C6 H9 N O

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 106-91-2

CMF C7 H10 O3

CM 6

CRN 103-11-7

CMF C11 H20 O2

CM 7

CRN 80-62-6

CMF C5 H8 O2

CM :

CRN 79-41-4

CMF C4 H6 O2

RN 214358-27-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole, ethenylbenzene, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9C1) (CA INDEX NAME)

CM 1

CRN 214358-26-6

CMF (C8 H8 . C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS



CM 5 CRN 106-91-2 CMF C7 H10 03



CM 6 CRN 100-42-5 CMF C8 H8

CRN 80-62-6 CMF C5 H8 O2

H2C Me_U_U_U_OMe

CM 8

CRN 79-41-4 CMF C4 H6 O2

CH2 Me-C-CO2H

CM 9

CRN 79-10-7 CMF C3 H4 O2

HQ_U_CH__CH2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 32 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1997:794056 CAPLUS Full-text

DOCUMENT NUMBER: 128:108413 ORIGINAL REFERENCE NO.: 128:21129a,21132a

TITLE: Electrophotographic toner using binder comprising

carboxy-substituted vinyl resin and

glycidyl-substituted resin as hardener

INVENTOR(S): Okada, Yasuo; Sakata, Kazuya; Hata, Masaaki PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan; Mitsui

Chemicals, Inc. Jpn. Kokai Tokkvo Koho, 8 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

						10/576676
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	JP 09319140 JP 3532033		19971212 20040531	JP 1996-131648	19960527	-
PRIO	RITY APPLN. INFO.:			JP 1996-131648	19960527	<
AB	a glycidyl-contain: 100,000 as a cross- value of 1-30 mg K0 toner is applicable	ing vin Linking OH/g an e to hi	yl resin wit agent and a d glass tran gh speed dev	rant and the following h weight average mol. of COOH-containing vinyl sition temperature Tg eloper and shows impro- evention of blocking a	weight of resin wit of 40-70°. wed reprod	10,000- h acid The uction
IC	ICM G03G009-087 ICS G03G009-08	pp			y	5.
CC		mistrv.	Photochemia	stry, and Photographic	and Other	
	Reprographic Proces	ses)				
	Section cross-refer	ence(s)	: 38			
IT	Binders Crosslinking agen	+ c				
IT	Electrophotographic (electrophotog. carboxy-substitu	toners toner s ted res acrylat	or high spec sin and glyc:	ed developer using bind idyl-substituted resin methacrylate-methacryli	hardener)	sing
	RL: IMF (Industrial use); PREP (Prepara (binder; electro	manufa tion); photog.	USES (Uses) toner for 1	(Technical or engineer nigh speed developer us in and glycidyl-substit	ing binder	:
	hardener)					
IT	acid-styrene copoly		e-glyciayl r	methacrylate-methacryli	С	
		manufa		(Technical or engineer	ed materia	11
RN	(binder; electro	photog.	toner for 1	nigh speed developer us in and glycidyl-substit		
CN				with butyl 2-propenoate -methyl-2-propenoate (IAME)
	CM 1					

CRN 141-32-2 CMF C7 H12 O2

CM 2 CRN 106-91-2 CMF C7 H10 O3

155



CRN 100-42-5

H2C==CH=Ph

CM 4

CRN 79-41-4 CMF C4 H6 O2

Me_CH2 Me_C_CO2H

L95 ANSWER 33 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1997:386591 CAPLUS Full-text

DOCUMENT NUMBER: 127:96486

ORIGINAL REFERENCE NO.: 127:18573a,18576a

TITLE: Preparation of rapid-curing low-temperature selfcrosslinking binder for pigment printing

AUTHOR(S): Li, Runsong; Chen, Jinxi; Liu, Hanzhen; Zhao, Zhaojun CORPORATE SOURCE: Dep. Chem., Huazhong Univ. Sci. Technol., Wuhan,

430074, Peop. Rep. China

SOURCE: Huazhong Ligong Daxue Xuebao (1996), 24(Suppl. 2),

134-136

CODEN: HLDXE6; ISSN: 1000-8616

Huazhong Ligong Daxue Xuebao

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A rapid-curing low-temperature acrylate self-crossiinking binder HS-II was manufactured from Bu acrylate, Et acrylate, styrene, Me methacrylate glycidyl methacrylate, 2-aminoethyl acrylate, N-butoxymethyl methacrylamide, N-hydroxy Me acrylamide, methacrylic acid by core shell polymerization The HS-II blinder is suitable for printing cotton and synthetic fiber at low temps.

CC 40-6 (Textiles and Fibers)

IT Crosslinking

PUBLISHER:

(autocrosslinking; preparation of rapid-curing low-temperature selfcrosslinking binder for pigment printing)

IT Polymerization

(emulsion, core-shell; preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing)

IT Binders

Textile printing

(preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing) 192138-56-0P, 2-Aminoethyl acrylate-N-butoxymethyl methacrylamide-butyl acrylate-ethyl acrylate-glycidyl methacrylate-N-hydroxymethyl acrylamide-methacrylic acid-methyl methacrylate-styrene copolymer RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsion, HS-II; preparation of rapid-curing low-temperature selfcrosslinking binder for pigment printing) 192138-56-0P, 2-Aminoethyl acrylate-N-butoxymethyl methacrylamide-butyl acrylate-ethyl acrylate-glycidyl methacrylate-N-hydroxymethyl acrylamide-methacrylic acid-methyl methacrylate-styrene copolymer RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsion, HS-II; preparation of rapid-curing low-temperature selfcrosslinking binder for pigment printing) 192138-56-0 CAPLUS RN 2-Propenoic acid, 2-methyl-, polymer with 2-aminoethyl 2-propenoate, CN N-(butoxymethy1)-2-methy1-2-propenamide, buty1 2-propenoate, ethenylbenzene, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CM 1 CRN 7659-38-3 CMF C5 H9 N O2 H2N-CH2-CH2-O-Ü-CH-CH2 CM 2 CRN 5153-77-5 CMF C9 H17 N O2 0 CH2 n-Buo_CH2_NH_U_U_U_MA CM 3

HO_CH2_NH_C_CH_CH2

CRN 924-42-5 CMF C4 H7 N O2

CRN 141-32-2 CMF C7 H12 O2



CM 5

CRN 140-88-5 CMF C5 H8 O2

CM 6

CRN 106-91-2 CMF C7 H10 O3



CM 7

CRN 100-42-5 CMF C8 H8

H2C - CH-Ph

CM 8

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

Me_U_CO2H

L95 ANSWER 34 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1996:35300 CAPLUS Full-text

DOCUMENT NUMBER: 124:89826

ORIGINAL REFERENCE NO.: 124:16827a,16830a

TITLE: Water-based materials for conditioning underlayers and

finishing of building exterior walls
INVENTOR(S): Ikeuchi, Tadahiko; Asada, Yoshibumi
PATENT ASSIGNEE(S): S K Kaken Kk, Japan

SOURCE: Jpn. Kokai Tokkvo Koho, 10 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

AB

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 07278463	A	19951024	JP 1994-100740	19940413 <
	JP 3041189	B2	20000515		
DIO	TTV ADDIN THEC .			TD 1994=100740	19940413 /

Title materials contain inorg, powders and emulsions of (1) triple layers, i.e., (A) epoxy-containing polymer layers, (B) copplymers lanactive to epoxy or carboxyl, and (C) carboxyl- and amide-substituted polymer layers, or of (2) multilayer structures of A (as center)-C double layers associated with (a) B and C on A or with (b) C on A at pigment volume concentration (V) 40-70\$. Building exterior walls are coated with the compns. and overcoated with (1') silicone-type water-based resin enamels or with (2') single-layer elastic finishing materials. Thus, 30.00 parts emulsion comprising 23.33:54.43:0.50 styrene (T)-Bu acrylate (II) -qlycidyl methacrylate copolymer inner layer and 5.83:13.61:0.30:2.00 I-II-Me methacrylate-acrylamide copolymer outer layer was mixed with T102 5.00, heavy CaCO3 23.79, and other additives to give a composition (V 40%), which was coated on a slate plate to give a test piece showing good peeling and cracking resistance.

- IC ICM C09D005-00
 - ICS C09D005-00; B05D007-24; C08G059-40; C09D151-00; C09D163-00; E04F013-02
- CC 38-3 (Plastics Fabrication and Uses)
- Section cross-reference(s): 42
- IT Siloxanes and Silicones, preparation
 - RL: IMF (Industrial manufacture); MSC (Miscellaneous); PREP (Preparation) (crosslinkable, top coating; water-based undercoatings including multilayer emulsions and inorg. powder for building exterior walls)
- IT 172887-72-8P, Cyclohexyl methacrylate-2-ethylhexyl acrylate-γ-methacryloyloxypropyltrimethoxysilane copolymer

RL: IMF (Industrial manufacture); MSC (Miscellaneous); PREP (Preparation) (crosslinkable, top coating; water-based undercoatings including multilayer emulsions and inorg, powder for building exterior

walls)

17 26423-43-3P, Butyl acrylate-glycidyl methacrylate-styrene copolymer 34871-68-6P, Acrylamide-butyl acrylate-methyl

methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsions; water-based undercoatings including multilayer emulsions

and inorg. powder for building exterior walls)
IT 36428-43-3P, Butyl acrylate-glycidyl methacrylate-styrene

copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(emulsions; water-based undercoatings including multilayer emulsions and inora, powder for building exterior walls)

RN 26428-43-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2-\circ} = \overset{\circ}{\mathbb{L}} \overset{\text{CH}_2}{\longrightarrow} \overset{\text{CH}_2$$

CM 3

CRN 100-42-5

H2C= CH-Ph

DOCUMENT NUMBER: 122:268117

ORIGINAL REFERENCE NO.: 122:48905a,48908a

TITLE: Heat-resistant binders for nonwovens for automobile

interiors

INVENTOR(S): Arimitsu, Masaru; Inoe, Masahiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07026461	A	19950127	JP 1993-164392	19930702 <
PRIORITY APPLN. INFO.:			JP 1993-164392	19930702 <
AB The binders compris	e polvm	er emulsions	(A) prepared by cop	olvmg, 100 parts

(solids) monomer pseudo emulsions with 5-100 parts monomers comprising 50-1008 (meth)acrylamide, and optionally contain 3-30 parts film-forming agents per 100 parts (solide) A emulsion. A nonwoven fabric was dipped in a solution containing 100 parts of 30% (solids) acrylamide-2-ethylhexyl acrylate-2-hydroxyethyl methacrylate-methacrylamide-emethacryla caid-N-methylolmethacrylamide-styrene copolymer emulsion and 10 parts H2O, squeezed, and dried to dive a nonwoven fabric with tensile strencth 30 kd/5 cm (room

temperature) and 26 kg/5 cm (190°). IC ICM D04H001-58

ICS C08F002-22; C08F020-56; C08L033-26; D06M015-285

CC 40-10 (Textiles and Fibers)

IT binding materials

((meth)acrylamide copolymers; heat-resistant binders for nonwovens for automobile interiors)

IT 123467-89-0P 137819-09-1P 137819-11-5P 162706-35-6P 162706-36-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(heat-resistant binders for nonwovens for automobile interiors)

IT 162706-35-6P 162706-36-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (heat-resistant binders for nonwovens for automobile interiors)

RN 162706-35-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate,

N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 923-02-4 CMF C5 H9 N O2

H2C 0 Me C C NH CH2 OH

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 100-42-5 CMF C8 H8

H2C-CH-Ph

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

```
RN
    162706-36-7 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-ethylhexyl
    2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate,
    N-(hydroxymethyl)-2-methyl-2-propenamide, 2-methyl-2-propenamide and
     2-propenamide (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C 0
Me_U_U_NH_CH2_OH
    CM 2
    CRN 868-77-9
    CMF C6 H10 O3
 H2C 0
Me C C C C H2 C C H2 O H
    CM 3
    CRN 103-11-7
    CMF C11 H20 O2
 Et_CH_Bu-n
    CM 4
    CRN 100-42-5
    CMF C8 H8
 H2C == CH-Ph
    CM 5
```

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 36 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1993:410397 CAPLUS Full-text

DOCUMENT NUMBER: 119:10397 ORIGINAL REFERENCE NO.: 119:2073a

TITLE:

Aqueous binder for textile material INVENTOR(S): Fink, Herbert; Suefke, Thomas; Kniese, Heiner

PATENT ASSIGNEE(S): Rohm G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

H2N_C_CH_CH2

PAT	ENT :	NO.			KIN	D	DATE			APPI	LICAT	ION	NO.		DATE	
						-										
EP	5274	11			A1		1993	0217		EP 1	1992-	1131	60		19920801	<
EP	5274	11			B1		1995	0222								
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	IT,	LI,	NL,	SE			
 · - m · ·			TATEO							DD 1	001	0110	OF A		10010011	

DE 1991-9110054 U 19910814 <--PRIORITY APPLN. INFO.:

An aqueous binder for textiles contains as aqueous dispersion of a filmforming self-crosslinking emulsion polymer (A) and a polymer (B) soluble in the aqueous phase of the binder composition which is composed of 10-100% acrylamide and/or methacrylamide. The weight ratio of A to B is 95:5 to 70:30 wherein A contains 1-15% of units of N-methylolacrylamide and/or methacrylamide. This combination provides good tensile strength, especially at higher temps, with low formaldehyde emission for binder-impregnated textiles.

```
A binder composition comprising 90% Bu acrylate-methacrylamide-methacrylic
     acid-Me methacrylate-N-methylolacrylamide copolymer and 10% acrylamide-2-
     hydroxyethyl methacrylate-methacrylamide copolymer (60:10:30) was used to
     impregnate a heat-reinforced polyester fiber nonwoven to give a web with
     tensile strength at 150° 231 N/5cm and HCHO emission 750 ppm.
TC
     ICM D06M015-285
     ICS D06M015-29
     40-5 (Textiles and Fibers)
     Section cross-reference(s): 38
     Birding materials
        (for textiles, aqueous acrylate polymer-acrylamide polymer mixts., for
        improved strength and reduced formaldehyde emission)
     27235-04-7, Butyl acrylate-methyl methacrylate-N-methylolacrylamide
     copolymer 28501-56-6, Acrylamide-methacrylamide copolymer
     28935-10-6 52640-90-1 57981-97-2
     135090-32-3 148230-94-8
     RL: USES (Uses)
        (aqueous binder composition containing, for reinforcing polyester nonwoven
webs,
       with improved strength and reduced formaldehyde emissions)
ΤТ
     28935-10-6 52640-90-1 57981-97-2
     148230-94-8
     RL: USES (Uses)
        (aqueous binder composition containing, for reinforcing polyester nonwoven
webs.
        with improved strength and reduced formaldehyde emissions)
     28935-10-6 CAPLUS
    2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
     2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and
     2-methv1-2-propenamide (CA INDEX NAME)
    CM
          1
     CRN 923-02-4
     CMF C5 H9 N O2
 Me_U_U_NH_CH2_OH
         2
    CM
     CRN 141-32-2
     CMF C7 H12 O2
     CM
    CRN 80-62-6
```

CMF C5 H8 O2

CRN 79-39-0 CMF C4 H7 N O

RN 52640-90-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

Eto_Ŭ_CH__CH2

CM 3

CRN 80-62-6

CMF C5 H8 O2

RN 57981-97-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

```
N-(2-hydroxymethy1)-2-methy1-2-propenamide, methy1 2-methy1-2-propenoate
    and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)
   CM 1
   CRN 923-02-4
CMF C5 H9 N O2
H2C 0
Me _ C _ NH_ CH2_ OH
   CM 2
   CRN 141-32-2
    CMF C7 H12 O2
п-вио-Й_сн_сн2
   CM 3
   CRN 80-62-6
    CMF C5 H8 O2
Me_U_U_OMe
   CM 4
    CRN 79-41-4
    CMF C4 H6 O2
   CH2
Me-C-CO2H
   CM 5
   CRN 79-39-0
```

CMF C4 H7 N O

```
RN 148230-94-8 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate,
    N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate and
    2-methyl-2-propenamide (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
  H2C O NH_CH2_OH
    CM 2
    CRN 140-88-5
    CMF C5 H8 O2
    CM 3
    CRN 80-62-6
    CMF C5 H8 O2
 H2C 0
Me_C_C_OMe
```

СН₂ ме_С_СО2Н

CM 5

CM 4 CRN 79-41-4 CMF C4 H6 O2 CRN 79-39-0 CMF C4 H7 N O

L95 ANSWER 37 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1991:633868 CAPLUS Fuil-text

DOCUMENT NUMBER:

115:233868 ORIGINAL REFERENCE NO.: 115:39873a,39876a

TITLE:

Aqueous polymer dispersions useful in bitumen-based roofing sheets

INVENTOR(S):

Matejcek, Franz; Angel, Maximilian; Schuhmacher,

Rudolf PATENT ASSIGNEE(S):

SOURCE:

BASF A.-G., Germany Eur. Pat. Appl., 20 pp.

DOCUMENT TYPE:

CODEN: EPXXDW Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND	DATE	APPLICATION NO.	DATE
A2	19910821	EP 1991-101650	19910207 <
A3	19921028		
B1	19960626		
NL, SE			
A1	19910822	DE 1990-4004915	19900216 <
A1	19910817	CA 1991-2036071	19910211 <
A	19931214	US 1992-928768	19920817 <
A	19940405	US 1993-99544	19930730 <
		DE 1990-4004915 A	19900216 <
		US 1991-655826 B	1 19910215 <
		US 1992-928768 A	3 19920817 <
	A2 A3 B1 NL, SE A1 A1	A2 19910821 A3 19921028 B1 19960626 NL, SE A1 19910822 A1 19910817 A 19931214	A2 19910821 EP 1991-101650 A3 19921028 B1 19960626 NL, SE A1 19910822 DE 1990-4004915 A1 19910817 CA 1991-2036071 A 19931214 US 1992-298768 A 19940405 US 1993-99544 DE 1990-4004915 A US 1991-655826 B

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Dispersions for the title use are prepared by adding 5-60 mol% (based on CO2H groups) oxide, hydroxide, or carbonate of Mq, Ca, or Zn to 25-60% solids aqueous emulsions (average particle size 20-400 nm) of polymers from C3-5 unsatd. mono- or dicarboxylic acids and/or anhydrides 3-55 and comonomers 97-45% at temps. between the glass temperature of the polymer and 100°. A 49.4% emulsion (average particle size 170.4 nm) was prepared from Bu acrylate 1170, methacrylic acid 210, acrylonitrile 105, and acrylamidoglycolic acid 15 g and mixed (100 g) with 4.7 g (44 equiv%) ZnO paste at 25°. A nonwoven 70:30 cellulose pulp-rayon fleece (basis weight 35 g/m2) impregnated with 50% (based on solids) dispersion containing 95 parts above-described Zn-containing polymer dispersion and 5 parts bisphenol A-HCHO resol resin and dried at 170° had wet tear strength 15 N/5 cm; vs. 0 without the binder.

ICM C08J003-03

ICS C08L057-00; D06N005-00

37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 40, 58

Binding materials

(water-thinned, carboxylated acrylic polymer metal salts, for nonwoven fleeces for high wet strength)

```
62180-77-2P, Butvl acrylate-methacrylic acid-methyl methacrylate-styrene
    copolymer zinc salt 87706-25-0P, Butyl acrylate-methacrylic acid
    copolymer zinc salt 137295-32-0P 137295-33-1P, Acrylonitrile-butyl
    acrylate-methacrylic acid copolymer zinc salt 137295-34-2P,
    Acrylonitrile-butyl acrylate-methacrylic acid copolymer calcium salt
    137295-35-3P, Acrylonitrile-butyl acrylate-methacrylic acid copolymer
    magnesium salt
                     137295-37-5P, Acrylonitrile-butyl acrylate-methacrylic
    acid-methacrylamide copolymer zinc salt 137295-38-6P, Acrylic
    acid-acrylonitrile-butyl acrylate-methyl methacrylate copolymer zinc salt
    137295-39-7P, Acrylonitrile-butyl acrylate-methacrylic acid-vinyl acetate
    copolymer zinc salt 137295-41-1P, Acrylamidoglycolic
    acid-acrylonitrile-butyl acrylate-methacrylic acid copolymer zinc salt
    137295-43-3P, Acrylonitrile-butyl
    acrylate-N-(hydroxymethyl)methacrylamide-methacrylic acid copolymer zinc
    salt
    RL: PREP (Preparation)
       (manufacture of, for aqueous binders, for nonwoven fleeces with high wet
       strength)
    137295-43-3P, Acrylonitrile-butyl
    acrylate-N-(hydroxymethyl)methacrylamide-methacrylic acid copolymer zinc
    salt.
    RL: PREP (Preparation)
       (manufacture of, for aqueous binders, for nonwoven fleeces with high wet
       strength)
    137295-43-3 CAPLUS
RN
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
    N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile, zinc salt
    (9CI) (CA INDEX NAME)
    CM 1
    CRN 137295-42-2
    CMF (C7 H12 O2 . C5 H9 N O2 . C4 H6 O2 . C3 H3 N)x
    CCI PMS
         CM
              2
         CRN 923-02-4
         CMF C5 H9 N O2
  H 21
 Me_U_U_NH_CH2_OH
         CM
              3
         CRN 141-32-2
         CMF C7 H12 O2
```

п-вио_С_сн__сн2

CRN 107-13-1 CMF C3 H3 N

H 2 C --- C H -- C --- N

CM 5

CRN 79-41-4 CMF C4 H6 O2

Me-C-CO2H

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L95 ANSWER 38 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1991:585751 CAPLUS Full-text

DOCUMENT NUMBER: 115:185751

ORIGINAL REFERENCE NO.: 115:31719a,31722a

TITLE: Aqueous polymer compositions as binders for leather

Fischer, Karl; Weyland, Peter INVENTOR(S):

PATENT ASSIGNEE(S): BASF A.-G., Germany SOURCE: Ger. Offen., 6 pp.

CODEN: GWXXBX DOCUMENT TYPE: Parent. LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4000976	A1	19910718	DE 1990-4000976	19900116 <
EP 437742	A1	19910724	EP 1990-124069	19901213 <
EP 437742	B1	19960228		
R: AT, BE, DE	, ES, FR	, GB, IT, NI	i	
AT 134678	T	19960315	AT 1990-124069	19901213 <
ES 2083418	Т3	19960416	ES 1990-124069	19901213 <
US 5159000	A	19921027	US 1990-630194	19901219 <
JP 04249566	A	19920904	JP 1990-406521	19901226 <
CA 2034181	A1	19910717	CA 1991-2034181	19910115 <
PRIORITY APPLN. INFO.:			DE 1990-4000976 A	19900116 <
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	

The title compns., giving leather with good wet and dry abrasion resistance, contain 5-60 parts mixture of 50-100% polymer from alkyl methacrylates 20-80, unsatd. carboxylic acids 0.5-10, and specified acrylic compds. 10-75%, 30-98% polymer from alkyl acrylates 30-98, unsatd, carboxylic acids 1-8, and specified comonomers 1-65%, and 0-50% hydrophilic polyurethane; 0.1-14% external plasticizer; and 0-20% natural and/or synthetic wax. Mixing 770 g 40% aqueous dispersion of 8.5:35:1.5:25:30 acrylic acid-Bu acrylate-N-

(hydroxymethyl)acrylamide-MMA-styrene copolymer, 20 g tris(butoxyethyl)phosphate, 160 q 50% aqueous 2:13:70:2:13 acrylic acid-

acrylonitrile-Bu acrylate-methacrylamide-styrene copolymer, and 50 g 35% montan wax emulsion gave a binder composition Cattle leather was primed with a com, preparation, sprayed twice with the above composition (diluted 1:1 with H2O, dry pickup 25 g/m2), dried at 70°, and pressed at 110° to give leather with wet abrasion resistance (IUF-450) 700 revolutions. ICM C08L033-10

T.C.

ICS C08L075-04; C08J003-05; C08J003-18; C08K005-521; C08K005-523; C14C009-02

ICA C08K005-10; C08K005-11; C08K005-12

ICI C08L033-10, C08L091-06, C08L091-08

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes) Section cross-reference(s): 38

Binding materials

(acrylic polymers, for abrasion-resistant water borne finishes for leather)

25135-39-1, Acrylic acid-ethyl acrylate-methyl methacrylate copolymer 54053-24-6, Acrylic acid-acrylonitrile-butyl acrylate-methacrylamide-styrene copolymer 90077-57-9, Acrylic acid-butvl acrylate-N-(hydroxymethyl)methacrylamide-methyl

methacrylate-styrene copolymer RL: USES (Uses)

(binders, for aqueous finishes for abrasion-resistant leather) 30077-57-9, Acrylic acid-butyl

acrylate-N-(hydroxymethyl)methacrylamide-methyl methacrylate-styrene copolymer RL: USES (Uses)

(binders, for aqueous finishes for abrasion-resistant leather)

RN 90077-57-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenvlbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM

CRN 923-02-4 CMF C5 H9 N O2

CM

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

H 2 C --- CH-- Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

H2C 0 OMe

CM

CRN 79-10-7 CMF C3 H4 O2

но_С_сн__сн2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L95 ANSWER 39 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1989:596706 CAPLUS Full-text

DOCUMENT NUMBER: 111:196706

ORIGINAL REFERENCE NO.: 111:32697a,32700a

TITLE: Binders for one-bath dyeing and finishing of textiles INVENTOR(S): Penzel, Erich Dr; Schoepke, Holger; Bassing, Dieter

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 5 pp.

SOURCE: Ger. Offen., 5 pp CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 3838463 A1 19890601 DE 1987-3739541 A1 19871121 <---

The title binders, having good sedimentation resistance in aqueous baths, comprise copolymers (min. film-forming temperature <0°; glass temperature -5° to -30°) of H2C:CC12 5-30, C2-10 alkyl acrylates 60-90, α , β -unsatd. C3-5 monor dicarboxylic acids and/or amides 0.3-5, N-methylol(meth)acrylamide and/or ethers with C1-4 alcs. 2-5, and H2C:CHS03Na $0-2^{\circ}$, the copolymers being prepared by emulsion polymerization with a disulfonate emulsifier. A copolymer (I; glass temperature -28°) was prepared from Bu acrylate 33.6, H2C:CC12 3.91, acrylic acid 0.78, 50° 8 aqueous acrylamide solution 0.78, 15° 8

aqueous N-methylolmethacrylamide solution 5.22, and 25% aqueous H2C:CHSO3Na solution 1.13 kg with 1.3 kg 45% aqueous di-Na C12 alkyldiphenyl ether disulfonate solution as the emulsifier. I was used in a textile dveing bath containing an easy-care finishing composition based on dimethylolurea, exhibiting better sedimentation resistance than a similar copolymer prepared with Na lauryl sulfate as the emulsifier.

- ICM C08F220-18 IC
 - ICS D06P001-52; D06M015-263; D06M015-248; D06M015-29; D06M015-423
- ICA C08F002-26
- ICI C08F220-18, C08F214-08, C08F220-04, C08F222-02, C08F220-54, C08F220-58,
- C08F228-02, C08F218-08, C08F218-10
- CC 40-9 (Textiles and Fibers)
- IΤ Binding materials
- (acrylic polymers, in aqueous dyeing-finishing baths for textiles) TТ
- 123502-45-4 123502-46-5 123502-47-6 123502-48-7 123502-49-8 123502-50-1
- RL: USES (Uses)
- (binders, dispersible, in aqueous dyeing-finishing baths for textiles) 123502-45-4 123502-47-6 123502-48-7
- 123502-49-8
- RL: USES (Uses)
- (binders, dispersible, in aqueous dyeing-finishing baths for textiles) RN 123502-45-4 CAPLUS
- CN
- 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-dichloroethene, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenamide and sodium ethenesulfonate (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 3039-83-6
 - CMF C2 H4 O3 S . Na

H2C= CH- SO3H



CM 2

CRN 923-02-4 CMF C5 H9 N O2

- CM 3
- CRN 141-32-2
- CMF C7 H12 O2

```
n-Bu0_U_CH__CH2
    CM
    CRN 79-10-7
    CMF C3 H4 O2
 HO_U_CH_CH2
    CM
          5
    CRN 79-06-1
    CMF C3 H5 N O
 H2N-C-CH-CH2
    CM
    CRN 75-35-4
    CMF C2 H2 C12
    CH2
C1_U_C1
RN
    123502-47-6 CAPLUS
    2-Propenoic acid, polymer with 1,1-dichloroethene, 2-ethylhexyl
CN
    2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and
     2-methyl-2-propenamide (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C 0
Me _ C _ NH_ CH2_OH
    CM 2
```

175

RN 123502-48-7 CAPLUS

N 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-dichloroethene, 1,1-dimethylethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenamide and sodium ethenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 3039-83-6

CMF C2 H4 O3 S . Na



CRN 1663-39-4 CMF C7 H12 O2

CM 3

CRN 923-02-4 CMF C5 H9 N O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

CM 6

CRN 79-06-1

CMF C3 H5 N O

CM 7

CRN 75-35-4 CMF C2 H2 C12

RN 123502-49-8 CAPLUS

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,1-dichloroethene, ethyl 2-propenoate,

N-(hydroxymethy1)-2-methy1-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4

CMF C5 H9 N O2

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 140-88-5

CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

Me-C-CO2H

CM 5

CRN 79-06-1 CMF C3 H5 N O

H2N-C-CH-CH2

CM 6

CRN 75-35-4 CMF C2 H2 C12

CH2 c1_U_C1

L95 ANSWER 40 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN 1988:512037 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 109:112037

ORIGINAL REFERENCE NO.: 109:18667a,18670a

TITLE: Nonwoven fabric with an acrylate interpolymer binder and a process of making the nonwoven fabric

INVENTOR(S): Stanislawczyk, Vic PATENT ASSIGNEE(S): Goodrich, B. F., Co., USA

SOURCE: Eur. Pat. Appl., 35 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP	264869	A2	19880427	EP 1987-115223	19871017 <
EP	264869	A3	19900214		
EP	264869	B1	19940713		

```
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
    CA 1332901
                       C
                              19941108
                                          CA 1987-548878
                                                                19871008 <--
    AU 8779596
                              19880421
                                         AU 1987-79596
                                                                19871013 <--
                        Α
    AU 612600
                       B2
                              19910718
    ES 2059341
                        Т3
                              19941116 ES 1987-115223
                                                                19871017 <--
    JP 63165563
                        Α
                              19880708 JP 1987-261898
                                                                19871019 <---
    JP 2559427
                        B2
                              19961204
    CN 87107050
                        Α
                              19880629
                                         CN 1987-107050
                                                                19871020 <---
    CN 1012086
                        В
                              19910320
PRIORITY APPLN. INFO.:
                                          US 1986-921165
                                                            A 19861020 <--
     A latex of a copolymer prepared from 1-20% unsatd. C4-10 dicarboxylic acid and
AB
     70-99% copolymerizable monomers comprising mainly acrylates and having glass
     temperature -20 to -60°, hysteresis loss ≤20%, raw polymer strength ≥300 psi,
     and elongation ≥350% is used as a binder for nonwoven fabrics, giving bonded
     fabrics having good wet and dry strength, solvent resistance, flexibility,
     softness, and resiliency. A latex of a copolymer prepared from itaconic acid
```

4.5, N-methylolacrylamide 1.0, and Bu acrylate 94.5 parts and having tensile strength 546 psi, elongation 553%, hysteresis loss 19.6%, and glass

- temperature -44° was used as a binder. TC ICM D04H001-64
- 40-10 (Textiles and Fibers) CC
- Section cross-reference(s): 37
- ST binder polymer nonwoven fabric; acrylate polymer binder fabric; carboxy polymer binder fabric; itaconic polymer binder fabric; polyester fabric binder polymer; paper binder carboxy polymer; crosslinking polymer binder fabric; softness binder polymer fabric; methylolacrylamide binder fabric; acrylamide methylol binder fabric
- Crosslinking ΙT
- (of polymeric binder on nonwoven fabric, for durability and softness)
- Binding materials
- (polymers, nonwoven fabrics containing, durable, soft)
- 52302-81-1 97700-99-7 115633-29-9
- 115633-30-2 115633-31-3 115633-32-4 116336-07-3 116336-08-4 116336-09-5 116336-11-9
 - RL: USES (Uses)
- (binder, nonwoven fabric containing, durable, soft) 53302-81-1 97700-99-7 115633-29-9 ΤТ
 - 115633-30-2 115633-31-3 115633-32-4
 - 116336-09-5 116336-11-9 RL: USES (Uses)
- (binder, nonwoven fabric containing, durable, soft) RN 53302-81-1 CAPLUS
- CN Butanedioic acid, 2-methylene-, polymer with butyl 2-propenoate (CA INDEX NAME)
 - CM
 - 1 CRN 141-32-2
 - CMF C7 H12 O2
- n-Buo_0_CH_CH2

CM

CRN 97-65-4 CMF C5 H6 O4

HO2C-U-CH2-CO2H

RN 97700-99-7 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

HO-CH2-NH-U-CH2-CH2

CM 2

CRN 141-32-2 CMF C7 H12 O2

п-вио-й-сн-сн;

CM 3

CRN 97-65-4 CMF C5 H6 O4

сн2 ноэс—С—снэ—соэн

RN 115633-29-9 CAPLUS

CN 2-Butenedioic acid (2E)-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5

CMF C4 H7 N O2

Double bond geometry as shown.

RN 115633-31-3 CAPLUS

CN 2-Butenedioic acid, 2-methyl-, (Z)-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

HO_ CH2_ NH_ CH_ CH_ CH2

CM 2

CRN 498-23-7 CMF C5 H6 O4

Double bond geometry as shown.

CM 3

CRN 141-32-2 CMF C7 H12 O2

0

RN 115633-32-4 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

H2C 0 Me_U_U_NH_CH2_ОН

CM 2

CRN 141-32-2 CMF C7 H12 O2

n-Bu0_0_CH_CH2

CM 3

CRN 97-65-4 CMF C5 H6 O4

сн2 но2с_сн2_сн2_со2н

RN 116336-09-5 CAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methylenebutanedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5

CMF C4 H7 N O2

HO- CH2- NH- C- CH- CH2

CM 2

CRN 97-65-4 CMF C5 H6 O4

HO2C_CH2_CO2H

CRN 80-62-6 CMF C5 H8 O2

RN 116336-11-9 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate and N-(methoxyacetyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 116336-10-8

CMF C6 H9 N O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 97-65-4

CMF C5 H6 O4

OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ACCESSION NUMBER: DOCUMENT NUMBER:

L95 ANSWER 41 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN 1987:638549 CAPLUS Full-text 107:238549

ORIGINAL REFERENCE NO.: 107:38331a,38334a

TITLE: Binders for inorganic fibers

INVENTOR(S): Izumibavashi, Masuji; Sagara, Masanori; Arita,

Yoshihiro

PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62170567	A	19870727	JP 1986-8157	19860120 <
PRIORITY APPLN. INFO.:			JP 1986-8157	19860120 <

AB Water-resistant binders for inorg, fiber nonwovens are prepared by modifying polyamines and/or their derivs. with R1(OZ)nR (R1 = C4-28 hydrocarbon group; Z = C2-4 alkylene; R = epoxy or isocyanate-containing mol. group, halogen; n = 0-30) and epichlorohydrin and emulsion polymerizing monomers having functional groups reactable with the modified polyamines (A) over A as emulsifiers. Thus, 45 parts Epomine SP 012 was treated with 29.2 parts Softnaol 30 qlycidyl ether for 2 h at 80° under N to give a product, which was treated with 97.2 parts epichlorohydrin for 3 h at 80° to give a modified polyamine (I). Then, 175.7 parts H2O and 4.8 parts aqueous 10% 2.2'-azobis(2-methylpropanediamine) were stirred at 55°, and an emulsion containing methacrylic acid 8, Me methacrylate 4, Et acrylate 148, aqueous 35.6% (nonvolatiles) I 34.5, and H2O 56.2 parts was added dropwise to the solution in 2 h at 55-60° held at 50-60°, and stirred and polymerized 1 h to give a water-borne polymer (II). A glass fiber web was prepared, immersed in aqueous 6% (nonvolatiles) II dispersion, squeezed to binder content 5% (solids), and dried to give a 100-q/m2 nonwoven web with tensile strength 4.3 kg/cm2 and 3.8 kg/cm2 (after immersion in H2O for 10 min at 20°), vs. 2.5 kg/cm2 and 1.0 kg/cm2, resp., using dodecvltrimethylammonium chloride instead of II.

ICM D04H001-58

ICS C08F002-24; D04H001-42

ICA D06M015-61

TC:

CC 40-10 (Textiles and Fibers)

ST water resistant binder glass nonwoven; inorg nonwoven binder acrylate polymer; polyamine crosslinked acrylate polymer binder

Binding materials

((meth)acrylic polymers crosslinked with polyamines modified

with epoxy compds, and epichlorohydrin as, water-resistant, for inorg, fiber nonwoven webs)

Glass fibers, uses and miscellaneous

RL: USES (Uses)

(binders for, (meth)acrylic polymers crosslinked with polyamines modified with epoxy compds. and epichlorohydrin as,

water-resistant)

#5133-97-5D, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer, polymers with polyamines modified with epichlorohydrin and 30261-69-9D, Butyl acrylate-glycidyl epoxy compds. methacrylate-methyl methacrylate copolymer, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-03-6D. polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-04-7D, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-05-80, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-06-90, polymers with polyamines modified with epichlorohydrin and epoxy compds. RL: USES (Uses)

```
(binders, water-resistant, for inorg. fiber nonwoven webs)
    25133-97-5D, Ethyl acrylate-methacrylic acid-methyl methacrylate
    copolymer, polymers with polyamines modified with epichlorohydrin and
    epoxy compds. 30261-69-9D, Butyl acrylate-glycidyl
    methacrylate-methyl methacrylate copolymer, polymers with polyamines
    modified with epichlorohydrin and epoxy compds. 111804-03-6D,
    polymers with polyamines modified with epichlorohydrin and epoxy compds.
    111804-05-30, polymers with polyamines modified with
    epichlorohydrin and epoxy compds. 111804-06-9D, polymers with
    polyamines modified with epichlorohydrin and epoxy compds.
    RL: USES (Uses)
        (binders, water-resistant, for inorg, fiber nonwoven webs)
RN
    25133-97-5 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl
    2-methyl-2-propenoate (CA INDEX NAME)
    CM
    CRN 140-88-5
    CMF C5 H8 O2
Eto_U_CH_CH2
    CM 2
    CRN 80-62-6
    CMF C5 H8 O2
  HoC
    CM 3
    CRN 79-41-4
    CMF C4 H6 O2
    CH2
We_U_COOR
RN 30261-69-9 CAPLUS
    2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate
    and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)
```

CM 1 CRN 141-32-2 CMF C7 H12 O2

CRN 106-91-2 CMF C7 H10 O3

CM 3

CRN 80-62-6 CMF C5 H8 O2

RN 111804-03-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysily1)propyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 2

CRN 141-32-2

CMF C7 H12 O2

```
CM 3
    CRN 79-10-7
    CMF C3 H4 O2
RN 111804-05-8 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenyltrimethoxysilane and
    ethyl 2-propenoate (9CI) (CA INDEX NAME)
    CM
        1
    CRN 2768-02-7
    CMF C5 H12 O3 S4
MeO_Si_CH__CH2
    CM 2
    CRN 140-88-5
    CMF C5 H8 O2
    CM 3
    CRN 79-41-4
    CMF C4 H6 O2
 CH2
Me_U_CO2H
RN 111804-06-9 CAPLUS
```

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(triethoxysilyl)propyl 2-methyl-2-propenoate

(9CI) (CA INDEX NAME)

```
CM 1
CRN 21142-29-0
CMF C13 H26 O5 Si
CM 2
CRN 140-88-5
CMF C5 H8 O2
CM 3
CRN 80-62-6
CMF C5 H8 O2
CM 4
CRN 79-41-4
CMF C4 H6 O2
```

Me_U_CH2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 42 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1987:178063 CAPLUS Full-text DOCUMENT NUMBER: 106:178063

ORIGINAL REFERENCE NO: 106:28901a, 28904a

TITLE: Binders for pigment printing of textiles
INVENTOR(S): Schmidt-Thuemmes, Juergen; Uhl, Guenter; Schoepke,

Holger

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger. SOURCE: Ger. Offen., 5 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
DE 3525799	A1	19870122	DE 1985-3525799		19850719 <	
EP 209029	A1	19870121	EP 1986-109207		19860705 <	
EP 209029	В1	19881130				
R: AT, BE, CH	, DE, FF	, GB, IT, 1	LI, NL, SE			
AT 39005	T	19881215	AT 1986-109207		19860705 <	
DK 8603422	A	19870120	DK 1986-3422		19860718 <	
PRIORITY APPLN. INFO.:			DE 1985-3525799	A	19850719 <	
			EP 1986-109207	A	19860705 <	
30 0-16	to does do so a	Jan toler Com				

- Self-crosslinking binders in the form of an emulsion polymerizate for pigment AB printing of textiles comprise butadiene and/or isoprene 10-70, C8-18 alkyl esters of (meth)acrylic acid 10-50, acrylonitrile and/or styrene 10-40, Nmethylolacrylamide, N-methylolmetharylamide and/or their C1-4 alkyl ethers 0.5-10, and copolymerizable monoethylenically unsatd. compds. 0-5%. A stable latex (44%) was prepared from butadiene 5.0 2-ethylhexyl acrylate 2.5. acrylonitrile 2.5, and N-methylolmethacrylamide 0.5 kg by free radical polymerization and used as a binder in a variety of Cu phthalocyanine printing pastes containing hydrocarbons, no hydrocarbons, or little hydrocarbons and showed high printing paste viscosities in all applications whereas binders prepared from C≤6-alkvl acrylates showed lowered print paste viscosities..
- TC. ICM C08F236-04
- ICS C08F220-18; C08F220-44; C08F220-58; C09D003-36; C09D003-80
- CC 40-6 (Textiles and Fibers)
- ΙT Textile printing
- (pigment, self-crosslinking binders for)
 - Binding materials
- ΙT
 - (self-crosslinking, for pigment printing)
- 79-10-7D, Acrylic acid. 78-79-5D, polymers with acrylic acid derivs. esters, polymers with butadienes 100-42-5D, polymers with butadiene and methylol(meth)acrylamide 103-11-7D, polymers with butadiene and methylol(meth)acrylamide 106-99-0D, Butadiene, polymers with acrylic acid derivs. 107-13-1D, Acrylonitrile, polymers with butadienes 923-02-4D, N-Methylolmethacrylamide, polymers with butadienes 924-42-5D, N-Methanolacrylamide, polymers with butadienes 2156-97-0D, Lauryl acrylate, polymers with butadiene and methylol(meth)acrylamide 4813-57-4D, Stearyl acrylate, polymers with butadiene and methylol(meth)acrylamide 25135-82-4 103144-02-1
 - 108144-03-2 108144-04-3
 - RL: USES (Uses)
 - (binders, for textile printing paste) 108144-02-1 108144-03-2 108144-04-3
- RL: USES (Uses)
- (binders, for textile printing paste)
- RM 108144-02-1 CAPLUS
- CN 2-Propenoic acid, 2-ethylhexyl ester, polymer with 1,3-butadiene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CM

CRN 923-02-4 CMF C5 H9 N O2

H2C 0 Me_U_U_NH_CH2_ОН

CM 2

CRN 107-13-1

CMF C3 H3 N

H 2 C --- C H -- C --- N

CM 3

CRN 106-99-0

CMF C4 H6

H2C-CH-CH-CH2

CM 4

CRN 103-11-7

CMF C11 H20 O2

RN 108144-03-2 CAPLUS

2-Propenoic acid, octadecyl ester, polymer with 1,3-butadiene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA

INDEX NAME)

CM 1

CRN 4813-57-4

CMF C21 H40 O2

```
CM 2
    CRN 923-02-4
CMF C5 H9 N O2
 H2C 0
Me C C NH CH2 OH
    CM 3
    CRN 107-13-1
     CMF C3 H3 N
 H 2 C --- C --- N
    CM 4
     CRN 106-99-0
     CMF C4 H6
 H 2 C CH CH CH CH 2
RN
    108144-04-3 CAPLUS
    2-Propenoic acid, dodecyl ester, polymer with 1,3-butadiene,
     N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA
     INDEX NAME)
     CM 1
     CRN 2156-97-0
     CMF C15 H28 O2
 Me- (CH2)11-0-U-CH=CH2
    CM 2
    CRN 923-02-4
     CMF C5 H9 N O2
```

```
Me_Ü_Ü_NH_CH2_OH
     CM
     CRN 107-13-1
     CMF C3 H3 N
 H2C-CH-C-N
     CM
     CRN 106-99-0
     CMF C4 H6
 H2C-CH-CH-CH2
OS.CITING REF COUNT: 2
                               THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
                                (2 CITINGS)
L95 ANSWER 43 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER -
                          1986:609787 CAPLUS Full-text
                          105:209787
DOCUMENT NUMBER:
ORIGINAL REFERENCE NO.: 105:33841a,33844a
TITLE:
                          Core-shell emulsion polymerization
AUTHOR(S):
                          Kong, Xiaoxing; Huang, Jiande; Zhou, Hong
CORPORATE SOURCE:
                          Chinese Textile Univ., Peop. Rep. China
SOURCE:
                          Huaxue Shijie (1986), 27(8), 344-7
                          CODEN: HUAKAB; ISSN: 0367-6358
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          Chinese
     Core-shell polymer emulsions were prepared by 2-stage emulsion polymerization
     In the 1st stage, Me acrylate, Bu acrylate, and Me methacrylate were
     polymerized to prepare a core emulsion. In the 2nd stage, acrylic acid,
     styrene, and N-hydroxymethylacrylamide were added to the core emulsion and
     polymerized to give core-shell emulsions. The structure of these structures
     were studied by SEM. These polymers showed good thermal stability and film forming properties. They were useful as binders for textile printing.
    37-3 (Plastics Manufacture and Processing)
     Section cross-reference(s): 40
TT
    Binding materials
        (core-shell vinvl polymers, for textile printing)
     90077-57-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by core-shell emulsion polymerization, as binders for
textile
        printing)
   90077-57-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
```

```
(preparation of, by core-shell emulsion polymerization, as binders for
textile
       printing)
RN 90077-57-9 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
    2-propenoate, ethenylbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and
    2-propenoic acid (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
H2C O
Me _ U _ U _ NH_ CH2 _ OH
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
n-вио_Й_сн_сн,
    CM 3
    CRN 100-42-5
    CMF C8 H8
H2C-CH-Ph
    CM 4
    CRN 80-62-6
    CMF C5 H8 O2
H2C OMe
    CM 5
```

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 44 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1986:446363 CAPLUS Full-text

DOCUMENT NUMBER: 105:46363

ORIGINAL REFERENCE NO.: 105:7619a,7622a

TITLE: Electrically conductive coating composition of a qlycidyl acrylic polymer and a reactive polysiloxane

INVENTOR(S): Vasta, Joseph A.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 5 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND		DATE		API	APPLICATION NO.		DATE				
	US	458999	9	_	A	_	1986	0520	US	1984-687361		19841228	<
	EP	189653			A2		1986	0806	EP	1985-308791		19851203	<
	EP	189653			A3		1987	0527					
		R: B	E, DE	, FR,	GB,	IT,	, NL,	SE					
	CA	125872	5		A1		1989	0822	CA	1985-497826		19851217	<
	DK	850603	4		A		1986	0629	DK	1985-6034		19851223	<
	NO	850526	7		A		1986	0630	NO	1985-5267		19851223	<
	AU	855160	6		A		1986	0703	AU	1985-51606		19851223	<
	AU	577003			B2		1988	0908					
	BR	850652	3		A		1986	0909	BR	1985-6523		19851226	<
	JP	611625	66		A		1986	0723	JP	1985-293394		19851227	<
	PRIORITY	APPLN	. INF	0.:					US	1984-687361	A	19841228	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

A coating composition has 20-90 liquid carrier, 10-80 weight% binder, and elec. conductive pigments such as carbon black and graphite in a pigment binder weight ratio of .apprx.(50-300):100. The binder is a blend of 20-90 acrylic polymer containing glycidyl groups and 10-80 weight% crosslinkable polysiloxane having attached to the Si atoms of its backbone C1-66 alkyl groups, Ph groups, and hydroxyl groups. A dry film of the $25-\mu$ coating has an elec. resistance of 5-20 Ω . The coating is used on Pb-allov grids of Pb-acid batteries to prolong the life of the battery or to decrease the size land weight of the battery. Thus, a Pb-Cu alloy and a Pb-Sb alloy grid were 1st coated with a 2% solution of δ -amino propyltrimethoxysilane; dried; sprayed with a coating composition containing acrylic resin solution, a polysiloxane, δ -glycidoxyypropyltrimethoxysilane, carbon black, finely divided graphite, PhMe, MeOH, and acetylacetone; and baked at .apprx.65° for .apprx.1. The resulting .apprx.40- μ film had an excellent adhesion to the alloy grids. When immersed in n H2SO4 and held at 2.3 V for 4 wk, the coating did not blister or deteriorate and no corrosion of the grid was noted, but uncoated grids exposed under the same conditions corroded severely.

IC ICM H01B001-24

INCL 252511000

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 38

```
IT Electrodes
       (battery, grids for, glycidyl acrylic polymer-coated)
ΙT
    38639-71-3
    RL: USES (Uses)
       (electrode grids coated with, for lead-acid batteries)
    38639-71-3
    RL: USES (Uses)
       (electrode grids coated with, for lead-acid batteries)
RN
    38639-71-3 CAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate,
    ethenylbenzene and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
n-Bu0_U_CH__CH2
    CM 2
    CRN 106-91-2
    CMF C7 H10 O3
    CM 3
    CRN 100-42-5
    CMF C8 H8
H2C == CH-Ph
    CM 4
    CRN 97-88-1
    CMF C8 H14 O2
```

n-Buo_U_U_H2

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 45 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1985:454909 CAPLUS Full-text

DOCUMENT NUMBER: 103:54909

ORIGINAL REFERENCE NO.: 103:8861a,8864a

TITLE: Polyfunctional aziridine crosslinking agents for aqueous magnetic recording media binder

Pendergrass, Daniel B., Jr. INVENTOR(S):

PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

SOURCE . U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 141,060,

abandoned. CODEN: USXXAM

DOCUMENT TYPE: Parent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4490505	A	19841225	US 1981-240265	19810316 <
BR 8102331	A	19811215	BR 1981-2331	19810415 <
JP 56163130	A	19811215	JP 1981-56378	19810416 <
JP 03049944	В	19910731		
IORITY APPLN. INFO.:			US 1980-141060 A	2 19800417 <

PRIORITY APPLN. INFO.: IIS 1980-141060 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

A dispersion of magnetizable particles in a water-thinned polymer having active H, epoxy, or epithio groups is mixed with a crosslinking agent comprising a polyfunctional aziridine derivative and coated onto a backing material such as a polyester film to prepare a magnetic recording medium. some cases, similar dispersions containing nonmagnetizable particles are also coated on the backing material. The method eliminates the use of organic solvents and gives coated backing materials having good blocking resistance. Thus, 100 parts iron oxide particles containing a dispersant 2, Me2NCH2CH2CH 2, and H2O 120 parts were mixed with 75 parts of an emulsion containing 33.5% copolymer prepared from Bu acrylate 60, Me methacrylate 20, 2-hydroxyethyl acrylate 15, and methacrylic acid 5 parts, mixed with 2.6 parts EtC(CH2O2CCH2CH2R)3 (R = methylaziridino) [52234-82-9] and 3 parts fatty ester (lubricant), filtered, degassed, coated on a plasma-treated poly(ethylene terephthalate) [25038-59-9] film, oriented magnetically in the longitudinal direction, and dried 120 s at .apprx.90° to prepare a magnetic recording tape.

IC ICM C08L075-04 TCS B05D005-12

INCL 524591000

37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 42

aziridine crosslinking ag binder; binder ag magnetic tape; acrylic binder ag crosslicking; polyester magnetic tape binder; iron oxide binder crosslipking

ΙT Banding materials

> (aqueous dispersions of, for magnetic tape manufacture, crosslinking agents for)

Crosslinking agents

(aziridines, for aqueous binders, in magnetic tape manufacture) 9010-77-9 25030-94-8 30174-67-5 65339-94-8 66331-20-2 66988-70-3 80892-80-4 80893-64-7 80941-02-2 80941-36-2

95795-66-7 105681-87-6

RL: USES (Uses)

(aqueous binders containing, aziridines for crosslinking of)

7652-64-4 7722-73-8 52234-82-9 57116-46-8 80873-37-6

RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agents, for aqueous binders in magnetic tape

(crosslinking agents, for aqueous binders in Magnetic tapmanufacture)

IT 1309-37-1, properties

RL: PRP (Properties)

(magnetic coatings of, aqueous binders for, crosslinking agents

IT 25230-94-8 95795-66-7 RL: USES (Uses)

(aqueous binders containing, aziridines for crosslinking of)

RN 25230-94-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1

CMF C5 H8 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 95795-66-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1

CMF C5 H8 O3

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 106-91-2

CMF C7 H10 O3

CM 4

CRN 80-62-6 CMF C5 H8 O2

H2C 0 4e_U_U_0Me

CRN 79-41-4 CMF C4 H6 O2

Me_U_CO2H

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 46 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1983:523608 CAPLUS Full-text

DOCUMENT NUMBER: 99:123608

ORIGINAL REFERENCE NO.: 99:19049a,19052a

TITLE: Self-crosslinking aqueous polymer dispersion

INVENTOR(S): Fink, Herbert; Suetterlin, Norbert; Huebner, Klaus; Siol, Werner; Tilch, Willi

PATENT ASSIGNEE(S): Rohm G.m.b.H., Fed. Rep. Ger.

SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: Facent

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3147007	A1	19830609	DE 1981-3147007	19811127 <
DE 3147007	C2	19831006		
EP 80635	A2	19830608	EP 1982-110514	19821115 <
EP 80635	A3	19830706		
EP 80635	B1	19861112		
R: DE, FR, C	BB, NL, SE			
US 4473678	A	19840925	US 1982-441602	19821115 <
JP 58103545	A	19830620	JP 1982-204708	19821124 <
JP 02049337	В	19901029		
PRIORITY APPLN. INFO.	:		DE 1981-3147007 A	19811127 <
ASSIGNMENT HISTORY FOR	R US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	

B Dispersions of copolymers prepared from H2C:CRCOMHCH2OH (R = H or Me), a hydroxyalkyl ester of an α , β -unsatd. mono- or dicarboxylic acid, and other monomers such as acrylate esters, vinyl esters, and styrene are mixed with 0,2-5% urea [57-13-6], which inhibits the release of HCHO from the copolymers. The crosslinkable copolymers are useful as textile binders, etc. The urea has little effect on the rate of dissoln. of the crosslinked copolymers in solvents such as C12C:CHCl and iso-BucOMe. Thus, a copolymer dispersion was prepared by emulsion polymerization of Me methacrylate 200, Bu acrylate 144, N-methylolmethacrylamide 16, 2-hydroxyethyl acrylate (I) 20, methacrylamide 12, methacrylic acid 4, and ethylene glycol dimethacrylate 4 parts and mixed with 3% urea (based on solids). The loss of HCHO from the copolymer [87097-16-3] during 15 min at 140° was 0.00%, compared with 0.154% for a dispersion containing no urea. The omission of I from the copolymer decreases the solvent resistance of the urea-containing, crosslinked copolymer.

```
IC
    C08L033-08; C08L033-10; C08L033-26; C08L031-02; C08L025-04; C08J003-06
CC
    37-6 (Plastics Manufacture and Processing)
IT
    Einding materials
        (methylolmethacrylamide copolymers, containing urea as formaldehyde
        acceptor)
        (of methylolmethacrylamide copolymers, urea as formaldehyde acceptor
     87097-16-3
                87097-17-4 87097-18-5
     87097-19-6 87097-20-9
     RL: USES (Uses)
        (formaldehyde acceptor for, urea as)
     87097-16-3 87097-17-4 87097-18-5
     27007-19-6
     RL: USES (Uses)
        (formaldehyde acceptor for, urea as)
RN
    87097-16-3 CAPLUS
CN
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
     1,2-ethanediyl bis(2-methyl-2-propenoate), 2-hydroxyethyl 2-propenoate,
     N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate and
     2-methy1-2-propenamide (9CI) (CA INDEX NAME)
    CM
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C O
Me _ U _ U _ NH_ CH2 _ OH
     CM
    CRN 818-61-1
     CMF C5 H8 O3
 но_сн2_сн2_о_й
     CM
         3
     CRN 141-32-2
     CMF C7 H12 O2
         _ CH___ CH 2
```

202

```
CRN 97-90-5
   CMF C10 H14 O4
   CM 5
   CRN 80-62-6
   CMF C5 H8 O2
H2C O
Me_U_U_OMe
   CM 6
   CRN 79-41-4
   CMF C4 H6 O2
CH2
Me—C—CO2H
   CM 7
   CRN 79-39-0
   CMF C4 H7 N O
```

H2C 0 NH2

RN 87097-17-4 CAPLUS

CMF C5 H9 N O2

2-hydroxyethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4

CN Butanedioic acid, methylene-, polymer with ethyl 2-propenoate,

RN 87097-18-5 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with butyl
2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate and
N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)
CM 1

```
CRN 2478-10-6
   CMF C7 H12 O3
  CM 2
   CRN 923-02-4
   CMF C5 H9 N O2
H2C 0
Me U U NH-CH2-OH
   CM 3
   CRN 141-32-2
   CMF C7 H12 O2
п-вио_С_сн__сн,
   CM 4
   CRN 100-42-5
   CMF C8 H8
H2C-CH-Ph
   CM 5
```

H2C ме——С_0_0-сH2—сН——СH2

CRN 96-05-9 CMF C7 H10 O2

RN 87097-19-6 CAPLUS

 ${\tt CN} \hspace{0.5cm} \hbox{2-Propenoic acid, ethyl ester, polymer with 4-hydroxybutyl 2-propenoate} \\$

```
and N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)
    CM 1
    CRN 2478-10-6
    CMF C7 H12 O3
    CM 2
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C O
Me _ U _ U _ NH_ CH2 _ OH
    CM 3
    CRN 140-88-5
    CMF C5 H8 O2
                            THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
OS.CITING REF COUNT: 2
                              (2 CITINGS)
L95 ANSWER 47 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
                       1981:210265 CAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        94:210265
ORIGINAL REFERENCE NO.: 94:34401a,34404a
TITLE:
                        Nonwoven fabrics
INVENTOR(S):
                        Warburton, Charles Edward, Jr.
PATENT ASSIGNEE(S):
                       Rohm and Haas Co., USA
SOURCE:
                        Eur. Pat. Appl., 52 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
```

PATENT NO.	KIND DATI	E APPL	ICATION NO.	DATE
EP 21693	A1 198:	10107 EP 1	980-301922	19800609 <
EP 21693	B1 198	41003		
R: BE, DE, E	R, GB, IT, NL	, SE		

```
19790612 <--
    US 4291087
                              19810922 US 1979-47839
                       A
    ZA 8003460
                       A
                              19810729 ZA 1980-3460
                                                                19800610 <--
    CA 1139260
                       A1
                              19830111 CA 1980-353663
                                                                19800610 <--
    JP 56043458
                        A
                              19810422 JP 1980-78870
                                                                19800611 <--
PRIORITY APPLN. INFO.:
                                          US 1979-47839
                                                            A 19790612 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     Nonwoven fabrics, preferably based on hydrophobic fibers such as polyesters
     and polyolefins, are manufactured using a hydrophobic binder consisting of
     polymers from unsatd, monomers and having mol, wts. 50,000-10,000,000, glass
     temperature of -60° to +40°, and being free of ethylenic unsatn.,
     photosensitive groups, or crosslinking agents. The binder-containing fiber
     mass is dried above the glass temperature of the polymer and exposed to a
     radiation source to cure the polymer chains to give a nonwoven fabric
     resistant to dry cleaning solvents and laundering and having high wet
     strength. Thus, polypropylene carded web having d. 25 g/m2 and prepared from
     3 denier fibers having length 38 mm was treated with a 66:34 Bu acrylate-
     styrene copolymer [25767-47-9] binder to dry add on 40.0%, dried 15 min at
     60° in a forced air oven, and cured by passing 6 times at 60 ft/min under 2 80
     W/m Hg vapor lamps to give a fabric having dry tensile strength 189 ± 4 N/m,
     wet tensile strength 112 ± 9 N/m, and capable of surviving 8 wash cycles.
TC
    D04H001-64A
CC
    39-11 (Textiles)
    Electron beam, chemical and physical effects
ΙT
        (crosslinking by, of hydrophobic polymer binders on
       hydrophobic nonwoven textiles)
ΙT
    Binding materials
       (hydrophobic radiation-curable polymers, for hydrophobic nonwoven
       textiles)
    Crosslinking
       (radiochem., of hydrophobic polymer binders on hydrophobic nonwoven
       textiles)
    25085-19-2 25586-20-3 25686-45-7
ΙT
    25767-47-9 26745-19-7 40893-50-3
                                         65379-26-2
    68156-21-8
                 76348-61-3 76348-62-4
    76397-94-9
               77729-76-1 77729-77-2
    77729-78-3 77729-79-4 77729-80-7
    77729-81-8 77729-82-9
    RL: USES (Uses)
       (binders, radiation-curable, for hydrophobic nonwoven textiles)
    25322-25-2 25586-20-3 25852-37-3
    77729-83-0
    RL: USES (Uses)
        (binders, radiation-curable, for rayon nonwoven fabrics)
    25085-19-2 25586-20-3 25686-45-7
    26745-19-7 40893-50-3 68156-21-8
    76348-61-3 76348-62-4 76397-94-9
    77729-76-1 77729-77-2 77729-78-3
    77725-79-4
                77729-80-7 77729-81-8
    77729-82-9
    RL: USES (Uses)
        (binders, radiation-curable, for hydrophobic nonwoven textiles)
RN
    25085-19-2 CAPLUS
CN
    2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl
    2-propenoate (CA INDEX NAME)
    CM 1
    CRN 103-11-7
    CMF C11 H20 O2
```

```
CRN 79-10-7
    CMF C3 H4 O2
RN 25686-45-7 CAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-propenenitrile
    (CA INDEX NAME)
    CM 1
    CRN 141-32-2
CMF C7 H12 O2
    CM 2
    CRN 107-13-1
    CMF C3 H3 N
H 2 C --- C H -- C --- N
    CM 3
    CRN 79-10-7
    CMF C3 H4 O2
RN 26745-19-7 CAPLUS
CN Butanedioic acid, 2-methylene-, polymer with butyl 2-propenoate and
    ethenylbenzene (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
```

```
n-Bu0_U_CH__CH2
    CM 2
    CRN 100-42-5
    CMF C8 H8
H2C==CH=Ph
    CM 3
    CRN 97-65-4
    CMF C5 H6 O4
но20-0-042-002н
    40893-50-3 CAPLUS
RN
CN 2-Propenoic acid, ethyl ester, polymer with
    N-(hydroxymethyl)-2-methyl-2-propenamide and 2-methyl-2-propenamide (CA
    INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C 0
Me_U_U_NH_CH2_OH
    CM 2
    CRN 140-88-5
    CMF C5 H8 O2
 Eto_U_CH_CH2
    CM 3
```

CRN 79-39-0 CMF C4 H7 N O

RN 68156-21-8 CAPLUS

2-Propenoic acid, polymer with butyl 2-propenoate and ethenylmethylbenzene (CA INDEX NAME)

CM 1

CRN 25013-15-4 CMF C9 H10

CCI IDS



D1- Me

D1-CH-CH2

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 76348-61-3 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

```
CM 1
    CRN 76348-57-7
    CMF C17 H14 O3
         O_CH2_CH_CH2
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
    CM
    CRN 100-42-5
    CMF C8 H8
H2C-CH-Ph
    CM
    CRN 79-10-7
    CMF C3 H4 O2
 но_Й_сн_сн2
    76348-62-4 CAPLUS
RN
CN
    Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with ethenylbenzene,
    2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)
    CM 1
```

CRN 76348-57-7 CMF C17 H14 O3

но_й_сн_сн2

RN 76397-94-9 CAPLUS
CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl
2-propenoate, ethenylbenzene, ethenylmethylbenzene and 2-propenoic acid
(9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CRN 25013-15-4 CMF C9 H10 CCI IDS



D1-Me

D1-CH-CH2

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM 5

CRN 79-10-7

CMF C3 H4 O2

```
но_0_сн__сн2
RN 77729-76-1 CAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and 1-methylpropyl
    2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 2998-08-5
    CMF C7 H12 O2
    CM 2
    CRN 100-42-5
CMF C8 H8
 H2C ___ CH_Ph
    CM 3
    CRN 79-10-7
    CMF C3 H4 O2
RN 77729-77-2 CAPLUS
CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with 1-methylpropyl
    2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)
    CM 1
    CRN 76348-57-7
    CMF C17 H14 O3
```

CRN 2998-08-5 CMF C7 H12 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 77729-78-3 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-propenoate, ethenylbenzene, ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CM 2

CRN 141-32-2

CMF C7 H12 O2

n-BuO_C_CH__CH2

CM 3

CRN 100-42-5 CMF C8 H8

H2C-CH-Ph

CM 4

CRN 97-63-2 CMF C6 H10 O2

H2C 0_0E

CM 5

CRN 79-10-7 CMF C3 H4 O2

OMF C3 H4 O2

но**_й_**сн**_**сн2

RN 77729-79-4 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CME C1/ 1114 05

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

H2C - CH-Ph

CM 4

CRN 97-88-1 CMF C8 H14 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2



RN 77729-80-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA

INDEX NAME)

CM 1

CRN 7534-94-3

CMF C14 H22 O2
Relative stereochemistry.

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 77729-81-8 CAPLUS

2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-, polymer with butyl 2-propenoate, 2-propenoic acid and 2-propenyl 2-benzoylbenzoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 76348-57-7 CMF C17 H14 O3

CMF C17 H14 O3

CRN 7534-94-3 CMF C14 H22 O2

Relative stereochemistry.

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM

CRN 79-10-7 CMF C3 H4 O2

RN 77729-82-9 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenamide and 2-propenenitrile (9C1) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

H2C 0 Me _ C _ NH_CH2_OH

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 140-88-5

CMF C5 H8 O2

CM 4

CRN 107-13-1 CMF C3 H3 N

H2C CHCN

CM 5

CRN 97-65-4 CMF C5 H6 O4

CM 6

CRN 79-06-1 CMF C3 H5 N O

H2N-C-CH-CH2

IT 25322-25-2 25586-20-3 77729-83-0

```
RL: USES (Uses)
       (binders, radiation-curable, for rayon nonwoven fabrics)
RN
    25322-25-2 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid
    (CA INDEX NAME)
    CM 1
    CRN 80-62-6
     CMF C5 H8 O2
 H2C 0
Me_U_U_OMe
    CM 2
    CRN 79-10-7
    CMF C3 H4 O2
 HO_U_CH__CH2
RN 25586-20-3 CAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenylbenzene (CA
    INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
 п-вио_Й_сн_сн2
    CM 2
    CRN 100-42-5
    CMF C8 H8
 H2C ___ CH __ Ph
    CM 3
```

CRN 79-10-7

CMF C3 H4 O2

RN 77729-83-0 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CM 2

CRN 140-88-5

CMF C5 H8 O2

CM 3

CRN 100-42-5

CMF C8 H8

CM 4

CRN 79-10-7

CMF C3 H4 O2

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но_0_сн_сн2
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OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L95 ANSWER 48 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1981:32147 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 94:32147

ORIGINAL REFERENCE NO.: 94:5297a,5300a

TITLE: Coating, impregnating and binding agent based on an aqueous dispersion of copolymers exhibiting epoxy

groups

INVENTOR(S): Czauderna, Bernhard; Einwiller, Andreas; Wendel, Kurt PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 12 pp.

DOCUMENT TYPE: CODEN: GWXXBX
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ΑT	ENT I	NO.			KIN)	DATE		API	PLICA	NOI	NO.		DATE	
_							-									
D	Ε	2918	827			A1		1980	1120	DE	1979-	-2918	827		19790510	<
Ε	Ρ	1916	1			A1		1980	1126	EP	1980-	-1023	81		19800502	<
Ε	Ρ	1916	1			B1		1983	0413							
		R:	ΑT,	BE,	CH,	DE,	FR,	GB,	IT,	LU, NI	L, SE					
J	P	5515	1025			A		1980	1125	JP	1980-	-5955	0		19800507	<
J	Ρ	0100	2620			В		1989	0118							
TORT	TV	APP'	T.NI	TMFO						DE	1979.	-2919	827	Δ	19790510	<

AB The title compns., which are storage-stable and give off no HCHO in use, contain 6-membered (hetero)cyclic compds. containing 2-4 (dimethylaminolalkyl groups. Thus, a latex containing apprx.600 parts 288.43:288 Et acrylate-glycidyl acrylate-vinyl acetate copolymer [76091-23-1] and 16 parts CHHO (GHZNMe2)3 [76091-38-8] is diluted to 15% solids. A carded fleece (40 g/m2) of 60:40 3.3-denier polyamide-polyester fibers (length 50 and 40 mm, resp.) is imprepated with this binder, squeezed, and dried 6 min at 150° to give a 3:1 fiber-binder fleece with excellent resistance to dry cleaning, e.g. bv C2C14.

- IC C09D003-58; D06M015-30
- CC 39-11 (Textiles)
 - I binder textile nonwoven; glycidyl acrylate copolymer binder; catalyst crosslinking binder; amine catalyst crosslinking; vinyl acetate copolymer binder
- IT Crosslinking catalysts

(cyclic polyamines, for glycidyl acrylate copolymer binders for nonwoven fabrics)

- IT Binding materials
- (glycidyl acrylate copolymers, for nonwoven fabrics, formaldehyde-free)
 T 27374-54-0 41259-37-4 76091-23-1
- RL: USES (Uses)

(binders, formaldehyde-free, for nonwoven textiles)

IT 15875-13-5 76091-38-8 76091-96-8
RL: CAT (Catalyst use): USES (Uses)

(catalysts, for crosslinking of glycidyl acrylate copolymer binders, in nonwoven textiles)

27274-54-0 41259-37-4 76091-23-1

RL: USES (Uses) (binders, formaldehyde-free, for nonwoven textiles) 27274-54-0 CAPLUS CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and 2-propenenitrile (CA INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 CM 2 CRN 107-13-1 CMF C3 H3 N H 2 C --- C H -- C --- N CM 3 CRN 106-91-2 CMF C7 H10 O3 RN 41259-37-4 CAPLUS CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate (CA INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 n-Buo_U_CH__CH2

CM 2

CRN 106-91-2 CMF C7 H10 O3

RN 76091-23-1 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and oxiranylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

CM 2

CRN 108-05-4 CMF C4 H6 O2

Aco-CH-CH2

CM 3

CRN 106-90-1 CMF C6 H8 O3

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L95 ANSWER 49 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:612006 CAPLUS Full-text DOCUMENT NUMBER: 91:212006

ORIGINAL REFERENCE NO.: 91:34177a,34180a

TITLE: Copolymer dispersions by polymerization of acrylic

acid esters

INVENTOR(S): Hann, Ernst Wilhelm; Neubach, Werner

KIND DATE

BASF A.-G., Fed. Rep. Ger. PATENT ASSIGNEE(S):

SOURCE: Ger. Offen., 15 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: PATENT NO.

	PAIENI NO.		DAIE	APPLICATION NO.	DATE
PRIO			19790927	DE 1978-2812038 DE 1978-2812038	19780320 < 19780320 <
AB		s. stab		resence of cationic res	
				by polymerization in t	
				lkvlene, with addition	
				adding 7% aqueous Na2S	
				Bu acrylate 3852, metha	
				s Na phosphate of polyc	
				4600 parts over 3 h to	
				Na [51441-90-8] stirre	
				ous Na sulfate of polyc	
				% copolymer [72021-73-9	
	compatible with cat:				
IC	C08F220-18; C08F002-				
CC	35-3 (Synthetic High	Polymer	rs)		
IT	Binding materials	-			
	(acrylic polymer	latexes	, for glass	fibers, manufacture of)
IT	33970-62-6P 34345-	16-9P	72021-73-9E	72021-80-8P	
	72021-81-9P 72034-	21-0P			
	RL: PREP (Preparatio	n)			
	(latexes, manufac	ture of,	, emulsifier	s for)	
ΙT	72021-81-9P				
	RL: PREP (Preparatio				
	(latexes, manufac	ture of,	, emulsifier	s for)	
RN	72021-81-9 CAPLUS				
CN				with ethenylbenzene,	
			2-propenamic	le and 2-hydroxypropyl :	2-propenoate
	(9CI) (CA INDEX NAM	E)			
	CM 1				

APPLICATION NO.

DATE

CRN 999-61-1

CMF C6 H10 O3

CRN 923-02-4 CMF C5 H9 N O2

H2C 0 Me C C NH CH2 OH

CM 3

CRN 140-88-5 CMF C5 H8 O2

Eto_C_CH_CH2

CM 4

CRN 100-42-5 CMF C8 H8

H2C == CH-Ph

L95 ANSWER 50 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:576959 CAPLUS Full-text

DOCUMENT NUMBER: 91:176959

ORIGINAL REFERENCE NO.: 91:28541a,28544a

TITLE: Wood particleboard materials using formaldehyde

binding agent

INVENTOR(S): Graser, Martin; Hann, Ernst Wilhelm; Henkel, Helmut;

Mayer, Johann; Schmidt-Hellerau, Christof BASF A.-G., Fed. Rep. Ger.

PATENT ASSIGNEE(S): SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1237	A1	19790404	EP 1978-100818	19780904 <
EP 1237	B1	19810617		
R: BE, DE, FR,	SE			

AT 7806444 A 19810815 AT 1978-6444 19780906 <-- AT 366398 B 19820413 PRIORITY APPIN. INFO.: DE 1977-2740207 19770907 <--

AB Treating wood chips with aqueous emulsions containing paraffin, urea (I) [57-13-6], and acrylate copolymers and then with aminoplast solns, and hotpressing gave particleboard with low HCHO emission. Thus, a 50:50 beechspruce chip mixture was treated with a 4.47% mixture of Bu acrylate-Et acrylate-N-(hydroxymethyl)methacrylamide copolymer [71803-25-3], I, and paraffin and then with a 12% mixture of Kauramin [25212-25-3], NH4Cl, NH4OH, and I based on dry weight of chips, and pressed for 6 min at 165° and 2.5 N/mm2 to give a board having thickness 23 mm, moisture content 15.4% d. 620 kg/m3, bending strength 18.6 N/mm2, swelling 1.5% after 2 h soaking in H2O, and HCHO emission 0.01%.

IC C08L097-02; B29J005-00; C08L061-20

CC 43-8 (Cellulose, Lignin, Paper, and Other Wood Products) Section cross-reference(s): 37

IT Binding materials

(aminoplasts and urea-containing acrylic copolymers, for manufacture of particleboard)

71803-25-3 71804-19-8 71804-20-1 71835-17-1 RL: USES (Uses)

(urea containing paraffins and, binders, for particleboards) IT -71804 - 20 - 1

RL: USES (Uses)
(urea containing paraffins and, binders, for particleboards)

RN 71804-20-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 1,2-propanediol mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

```
H<sub>2</sub>C
 ²∐_∐_<sub>⊙ме</sub>
   CM
  CRN 25584-83-2
   CMF C6 H10 O3
  CCT TDS
        CM 5
        CRN 79-10-7
        CMF C3 H4 O2
```

H3C-CH-CH2-OH

CORPORATE SOURCE:

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 51 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:88640 CAPLUS Full-text

DOCUMENT NUMBER: 90:88640

CRN 57-55-6 CMF C3 H8 O2

ORIGINAL REFERENCE NO.: 90:14059a,14062a

TITLE: Effect of the composition of binders on the quality of

pigment printing AUTHOR(S):

Vedeneeva, S. N.; Didenko, M. A.; Gandurin, L. I.; Gerasimova, A. S.

Vses. Nauchno-Issled. Inst. Prir. Khim. Volokna,

Moscow, USSR

SOURCE: Tekstil'naya Promyshlennost (Moscow, Russian Federation) (1978), (11), 57-60

CODEN: TTLPA2; ISSN: 0040-2397

DOCUMENT TYPE: Journal

LANGUAGE: Russian

Stable pigment prints with good physicochem, and mech, properties are obtained using polymer binders containing both COOH and CH2OH groups, i.e. 8:4.5:3.5:14 Bu acrylate-methacrylic acid-N-methylolmethacrylamide-styrene copolymer [65291-56-7]. The effect of the composition of the binder on physicomech. properties. of films and the quality of printed fabrics was determined Soft, elastic films were obtained from polymers containing Bu acrylate and chemical

```
resistant films were obtained from polymers containing Me methacrylate and
     styrene. Dispersions with the highest stability were obtained in the presence
     of S 10 [60328-41-8] emulsifier. Pigment printing with binders containing
     ≤4% emulsifier and having pH <5 gave good results on acetate, triacetate,
     rayon and polyester fabrics.
    39-7 (Textiles)
ΙT
    Binding materials
       (acrylic polymers, for textile printing, composition effect on properties
       of)
IT
    25035-69-2
                 25035-89-6 25951-39-7 26715-67-3 27340-76-7
    28935-09-3 65291-56-7 69254-23-5
    69383-11-5
    RL: USES (Uses)
       (binder, for pigment printing on textiles)
ΤТ
    65291-56-7 69254-23-5 69383-11-5
    RL: USES (Uses)
       (binder, for pigment printing on textiles)
    65291-56-7 CAPLUS
CN
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
    ethenylbenzene and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX
    NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
  H2C
Me_U_U_NH_CH2_OH
    CM
         2
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo_C_CH__CH2
    CM
         3
    CRN 100-42-5
    CMF C8 H8
Hoc - CH-Ph
```

CRN 79-41-4 CMF C4 H6 O2

Me_U_CO2H

RN 69254-23-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAMB)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

H2C O Me _ U _ U _ NH_ CH2_ OH

CM 2

CRN 141-32-2 CMF C7 H12 O2

п-вио_0_Сн_сн_сн2

CM 3

CRN 100-42-5 CMF C8 H8

H2C CH-Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

H2C O Me_U_U_OMe

```
CM 5
    CRN 79-41-4
    CMF C4 H6 O2
 Me_U_CO2H
   69383-11-5 CAPLUS
CN
   2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
    N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate
    (9CI) (CA INDEX NAME)
    CM
        1
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C O NH_CH2_OH
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
 n-Buo_C_CH__CH2
    CM 3
    CRN 80-62-6
    CMF C5 H8 O2
 Me_U_U_OMe
    CM
    CRN 79-41-4
    CMF C4 H6 O2
```

1.95 ANSWER 52 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN 1978:445001 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 89:45001 ORIGINAL REFERENCE NO.: 89:7023a,7026a

Acrylic latex for use on textile materials

INVENTOR(S): Plamondon, Joseph Edward; Wilber, William Robert;

Goth, Stephen PATENT ASSIGNEE(S): Rohm and Haas Co., USA

SOURCE: Ger. Offen., 29 pp. CODEN: GWXXBX

DOCUMENT TYPE: Parent. LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT NO.	KIND	DATE	APPLICATION NO.		DATE	
DE	2726806	A1	19771229	DE 1977-2726806		19770614	<
US	4107120	A	19780815	US 1976-697171		19760617	<
CA	1112387	A1	19811110	CA 1977-279849		19770603	<
ZA	7703463	A	19780726	ZA 1977-3463		19770608	<
GB	1583671	A	19810128	GB 1977-24352		19770610	<
BR	7703801	A	19780509	BR 1977-3801		19770613	<
BE	855743	A1	19771216	BE 1977-178487		19770616	<
SE	7707021	A	19771218	SE 1977-7021		19770616	<
NL	7706667	A	19771220	NL 1977-6667		19770616	<
JP	53002590	A	19780111	JP 1977-71584		19770616	<
JP	55046645	В	19801125				
FR	2355038	A1	19780113	FR 1977-18571		19770616	<
FR	2355038	В1	19800425				
AU	7726170	A	19781221	AU 1977-26170		19770616	<
AU	511706	B2	19800904				
US	4181769	A	19800101	US 1977-837964		19770929	<
	APPLN. INFO.:			US 1976-697171	A	19760617	
		IIS PATEN	T AVATLABLE	IN USUS DISPLAY FO			

PRIOR ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Heterpolymer latexes containing particles consisting of 30-60% polymeric core and 70-40% polymeric skin are manufactured by a 2-step emulsion polymerization of acrylic monomer mixts, containing small amts, of crosslanking agents which provide a core polymer having glass transition temperature, Tg, $\leq -20^{\circ}$ and a skin polymer having Tg 60 to -10°. The latexes are used to manufacture upholstery fabrics with good hand, drape, and low-temperature properties, coat leather and prepare (as binder) nonwoven fabrics. Thus, a heteropolymer latex containing 48% solids consisting of equal amts of a core 1:86:1:7:5 allyl methacrylate-Bu acrylate-itaconic acid-methacrylamide-Me methacrylate copolymer [65994-26-5] and sheath 57:1:35:7 butyl acrylate-itaconic acid-Me methacrylate-N-methylolmethacrylamide copolymer [65994-27-6] was coated on a silicone-coated release paper and dried to form a 50u-thick film. An aqueous 2:96:2 acrylamide-Bu acrylate-N-methylolacrylamide copolymer emulsion containing TiO2, Aerotex MW, NH4 stearate, and NH4OH was mech. foamed and applied as a 1500µ-thick coating to cotton twill which was dried 5 min at 120°. The latex-coated paper was placed on the foam and the composite was laminated 3 at 80° under pressure and cured 5 min at 150° after removing the

```
paper. The upholstery fabric product had Bally flex value 100,000 and could
    withstand temps. as low as -35° without cracking.
    C08F220-00
   39-6 (Textiles)
    Sinding materials
       (acrylic polymer emulsions, containing bicomponent particles, for nonwoven
       textiles)
    65994-26-5 65994-27-6 65994-28-7
    65994-29-8
    RL: USES (Uses)
        (bicomponent emulsion particles containing, for coating of textiles)
    65994-26-5 65994-27-6 65994-28-7
    RL: USES (Uses)
        (bicomponent emulsion particles containing, for coating of textiles)
    65994-26-5 CAPLUS
CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, methyl
    2-methy1-2-propenoate, 2-methy1-2-propenamide and 2-propeny1
    2-methyl-2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
п-вио_Й_сн_сн,
    CM 2
    CRN 97-65-4
    CMF C5 H6 O4
 ноэс-С-снэ-соэн
```

CM 3 CRN 96-05-9

IC

CC

ΙT

RN

CMF C7 H10 O2

Me_C_C_C_CH2_CH__CH2

CM 4

CRN 80-62-6 CMF C5 H8 O2

```
CM 4
    CRN 80-62-6
    CMF C5 H8 O2
 H2C O
Me_U_U_OMe
RN 65994-28-7 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl
    2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl
     2-methyl-2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
 H2C 0
Me _ C _ NH_ CH2_ OH
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
 n-Buo_0_CH__CH2
    CM 3
    CRN 97-90-5
    CMF C10 H14 O4
    CM 4
    CRN 80-62-6
    CMF C5 H8 O2
```

THERE ARE 16 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 16 RECORD (18 CITINGS)

L95 ANSWER 53 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:63229 CAPLUS Full-text

DOCUMENT NUMBER: 88:63229

ORIGINAL REFERENCE NO.: 88:9991a,9994a TITLE:

Composition for use in printing textiles

INVENTOR(S): Gandurin, L. I.; Didenko, M. A.; Vedeneeva, S. N.; Lukina, E. M.

PATENT ASSIGNEE(S): All-Union Scientific-Research and Experimental

Institute for the Processing of Chemical Fibers, USSR

SOURCE: Fr. Demande, 13 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent. LANGUAGE: French FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO	ο.	KIND	DATE	APE	LICATION NO.		DATE	
FR 23287	47	A1	19770520	FR	1976-31042		19761015	<
FR 23287	47	B1	19790706					
SU 61746	7	A1	19780730		1975-2182370		19751020	
PRIORITY APPLE	N. INFO.:			SU	1975-2182370	A	19751020	<
AB Compns.	for pigment	printi	ng natural .	and	synthetic texti	les h	oy a class	ical

ΑI procedure comprise pigment; Bu acrylate-methacrylic acid-Nmethylolmethacrylamide-styrene copolymer [65291-56-7] binder 10-25; a synthetic acrylic thickener that is a copolymer of (meth)acrylic acid, an alkyl acrylate, and the dimethacrylate ester of ethylene glycol neutralized with a primary amine 1-2; a mixture of C3 or C5 alkenylamine and a hydrosiloxane 1-2; glycerol [56-81-5] 0-2; and H2O 63-87 parts.

C09B067-00

P

- 39-7 (Textiles) CC
- тт Binding materials Thickening agents

(acrylic polymers, for pigment printing compns. for textiles)

- 65291-56-7
 - RL: USES (Uses)

(binding agents, for pigment printing compns. for textiles)

- 65291-56-7
 - RL: USES (Uses) (binding agents, for pigment printing compns. for textiles)
- RN 65291-56-7 CAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenvlbenzene and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)
 - CM 1
 - CRN 923-02-4
 - CME C5 H9 N O2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

H2C == CH=Ph

CM 4

CRN 79-41-4 CMF C4 H6 O2

Me-U-CO2H

L95 ANSWER 54 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1976:61138 CAPLUS Full-text

DOCUMENT NUMBER: 84:61138

ORIGINAL REFERENCE NO.: 84:10069a,10072a

TITLE: Absorbent nonwoven fabrics

INVENTOR(S): Katz, Howard; Ganslaw, Stuart H.

PATENT ASSIGNEE(S): National Starch and Chemical Corp., USA SOURCE: U.S., 10 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3922462	A	19751125	US 1974-459465	19740410 <
PRIORITY APPLN. INFO.:			US 1974-459465	19740410 <

```
A permanently absorbent nonwoven fabric consisted of a web of fibers, 5-100
AB
     weight% based on fibers of a crosslinkable binder, and 0.2-10 weight%, based
     on fibers and binder, of a surfactant consisting of at least 1 salt of a
     bisalkyl sulfosuccinate having alkyl substituents containing 13-4 carbon
     atoms. The most preferred surfactant was bis(tridecyl) sodium sulfosuccinate
     (I) [2673-22-5]. Carded rayon test webs were saturated to provide a 20
     weight% dry resin add-on with a solution containing a copolymer [26337-27-9]
     made from 400 parts vinyl acetate and 10 parts N-methylolacrylamide and 10
     parts I, to give a fabric with initial absorbancy <1 sec and absorbancy after
     2 aqueous extns. 6.6 sec compared to >300 sec for fabrics finished without I.
IC
    D06N
INCL 428290000
    39-11 (Textiles)
ΙT
    Binding materials
        (for rayon absorptive nonwoven fabrics)
IT
    25037-78-9 25085-41-0 25619-96-9 25951-70-6
                                                       26337-27-9
    26428-41-1 26428-44-4 32875-87-9 58152-79-7
    RL: USES (Uses)
       (binding materials, for absorbent rayon nonwoven fabrics)
    25085-41-0 58152-79-7
    RL: USES (Uses)
       (binding materials, for absorbent rayon nonwoven fabrics)
    25085-41-0 CAPLUS
CN
    2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate (CA
    INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
    CM
    CRN 108-05-4
    CMF C4 H6 O2
Aco-CH-CH2
    CM
         3
    CRN 79-10-7
    CMF C3 H4 O2
```

```
RN 58152-79-7 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl
    2-propenoate, ethyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo_U_CH__CH2
    CM 2
    CRN 140-88-5
    CMF C5 H8 O2
Eto_U_CH_CH2
    CM 3
    CRN 107-13-1
    CMF C3 H3 N
H 2 C - CH - C - N
```



CM 4 CRN 106-91-2 CMF C7 H10 O3

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L95 ANSWER 55 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN 1975:580968 CAPLUS Full-text ACCESSION NUMBER: DOCUMENT NUMBER: 83:180968

ORIGINAL REFERENCE NO.: 83:28437a,28440a

TITIE.

INVENTOR(S):

Pigment printing pastes

Dachs, Karl; Lengsfeld, Wolfgang; Renner, Klaus C.; Uhl. Guenter

PATENT ASSIGNEE(S):

BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 9 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT NO.		KI	ND DATE	Ξ	APE	PLICATION	NO.		D	ATE	
										-		
DE 2	2361423		A	1 1975	0612	DE	1973-236	1423		1	9731210	<
PRIORITY	APPLN.	INFO.:				DE	1973-236	1423		1	9731210	<
AB Ap	rinting	paste	that	produces	a prin	t of	durable	soft	hand	on	natural	or
	DE 2 PRIORITY	DE 2361423 PRIORITY APPLN.	DE 2361423 PRIORITY APPLN. INFO.:	DE 2361423 A PRIORITY APPLN. INFO.:	DE 2361423 A1 1975 PRIORITY APPLN. INFO.:	DE 2361423 A1 19750612 PRIORITY APPLN. INFO.:	DE 2361423 A1 19750612 DE PRIORITY APPLN. INFO.: DE	DE 2361423 A1 19750612 DE 1973-236 PRIORITY APPLN. INFO.: DE 1973-236	DE 2361423 A1 19750612 DE 1973-2361423 PRIORITY APPLN. INFO.: DE 1973-2361423	DE 2361423 Al 19750612 DE 1973-2361423 PRIORITY APPLN. INFO.: DE 1973-2361423	DE 2361423 A1 19750612 DE 1973-2361423 1 PRIORITY APPIN. INFO.: DE 1973-2361423 1	DE 2361423 A1 19750612 DE 1973-2361423 19731210 PRIORITY APPLM. INFO.: DE 1973-2361423 19731210

synthetic textile materials and their mixts, contains pigments, thickener, binder, water, emulsifier, and 0.1-1.0% methoxylated aminoplast whose methylol groups are ≥50% etherified with ≥20 mole% C10-30 alcs, and/or phenols. For example, to 100 parts 6% aqueous solution of ammonium polyacrylate were added 640 parts water, 180 parts 40% dispersion of 1:15:64:6:10:4 acrylic acidacrylonitrile-butyl acrylate-3-chloro-2-hydroxypropyl acrylate-methyl methacrylate-N-methylolmethacrylamide polymer [56899-29-7] and 50 parts 25% aqueous paste of chlorinated Cu phthalocyanine. With vigorous stirrings, 30 parts of the reaction product between 1 mole hexakis(methoxymethyl)melamine [3089-11-0] with 3 moles dodecanol-1 [112-53-8] was emulsified in the mixture A print made on cotton with this paste gave a brilliant colors with good fastness.

IC D06P

CC 39-7 (Textiles)

TТ Binding materials

(acrylic polymers-aminoplasts, for textile printing pastes) тт 28628-79-7 56899-29-7

27288-66-0 RL: USES (Uses)

(binders, containing aminoplasts, for textile printing pastes)

IT 56899-29-7 RL: USES (Uses)

(binders, containing aminoplasts, for textile printing pastes)

56899-29-7 CAPLUS RN

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 3-chloro-2-hydroxypropyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenenitrile and 2-propenoic

CM

acid (9CI) (CA INDEX NAME)

CRN 3326-90-7 CMF C6 H9 C1 O3

CM

CRN 923-02-4 CMF C5 H9 N O2

но_С_сн__сн2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 56 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1974:146955 CAPLUS Full-text

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 80:23730h,23731a

80:146955 Bonded nonwoven fabric

INVENTOR(S): PATENT ASSIGNEE(S): Kelley, Louis E. Rohm and Haas Co. U.S., 6 pp. CODEN: USXXAM

SOURCE: DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3776810	A	19731204	US 1971-182877	19710922 <
US 3812070	A	19740521	US 1971-208971	19711216 <
PRIORITY APPLN. INFO.:			US 1970-36499 A2	19700511 <
			US 1971-182877 A1	19710922 <

AB Polyalkylene glycol-modified copolymers of N-methylolacrylamides with acrylates were used as heat-curable binders and gave nonwoven fabrics with increased resilience, solvent-resistance and migration control. Fibrous polyester webs were treated with a mixture of methylolacrylamide-ethyl acrylate copolymer [26428-44-4] and polyethylene glycol [25322-68-3] mol. weight 285-3700. A control sample prepared without the glycol component was used for comparison. The webs treated with the glycol mixture showed an improved migration control. The resilience, as tensile load, was 10-20 for glycol-treated webs and 25 g for the control samples. Solvent resistance, determined by soaking the bonded fabric 15 min in perchlorethylene was 176-234 for a web sample containing a polyethylene glycol and 166-83 oz/in for the control sample. The same procedure was used for samples with varying proportions of the polyethylene glycol, mol. weight 285-315, from 2.5-12.5 weight %. The optimum migration control and resiliency were obtained with 5% glycol addition

B32B

INCL 161170000

39-11 (Textiles) CC

ΙT Binding materials (polyethylene glycol-modified acrylate-methylolacrylamide-unsatd.

carboxylic acid polymers, for nonwoven synthetic textiles) 26139-82-2 26428-44-4 51999-23-6 51999-24-7

RL: USES (Uses)

(binders, containing polyethylene glycol, for nonwoven synthetic textiles) 51999-24-7

RL: USES (Uses)

(binders, containing polyethylene glycol, for nonwoven synthetic textiles) 51999-24-7 CAPLUS

RN

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

HZC U Me CH2 OH

CM 2 CRN 141-32-2 CMF C7 H12 O2 n-Bu0-C-CH-CH2 CM 3 CRN 96-33-3 CMF C4 H6 O2 Me O_U_CH__CH2 CM 4 CRN 79-41-4 CMF C4 H6 O2 CH2 Me_C_CO2H OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) L95 ANSWER 57 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1972:407260 CAPLUS Full-text DOCUMENT NUMBER: 77:7260 ORIGINAL REFERENCE NO.: 77:1251a,1254a TITLE: Bonded fiber filling material PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co. SOURCE: Brit., 8 pp. CODEN: BRXXAA DOCUMENT TYPE: Patent

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 1267294		19720315	GB 1970-15528	19700401 <
	US 3660222		19720502	US	19690401 <
PRIC	DRITY APPLN. INFO.:			US 1969-811819	19690401 <

English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

- The title material with improved softness and support bulk, useful as filler AB in cushions and insulation, was prepared by discharging crimped intermingled fibers from an oscillating flat surface onto a horizontal flat surface and simultaneously spraying the layer with a resin so that 50% of the fiber contains .geq.70.deg. of the resin after each pass of the oscillating surface. Thus, poly(ethylene terephthalate) fibers (about 9.5 crimps per in.) were discharged from a conventional double-doffer garnett-crosslapper system onto an apron at 10 ft. per min and sprayed simultaneously with a composition containing a 23% solids Et acrylate-methacrylic acid-methyl methacrylate-Nmethylolmethacrylamide copolymer (I) [30943-44-3] emulsion and a crosslinker to give a laminate of 10 thin fiber layers containing about 75% I in the top half of each layer. The laminate was heated 2 and 4 min at 196.deg. to give soft material with a filling support weight 1.80 lbs. compared with 2.2 lbs. for previously prepared filler of similar softness. Process and apparatus and diagrams are given. IC B32B: D04H
- CC 39-11 (Textiles)
- IT Binding materials

(acrylic polymers, for intermingled crimped polyester fibers for cushion filling material)

IT 30943-44-3

RL: USES (Uses)

(binding materials, for crimped intermingled polyester fibers, for filling materials for cushion)

IT 30943-44-3

RL: USES (Uses)

(binding materials, for crimped intermingled polyester fibers, for filling materials for cushion)

RN 30943-44-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 923-02-4

CMF C5 H9 N O2

CM

CRN 140-88-5

CMF C5 H8 O2

CM 3

CRN 80-62-6

CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

Me-C-CO2H

L95 ANSWER 58 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:32667 CAPLUS Full-text

DOCUMENT NUMBER: 74:32667

ORIGINAL REFERENCE NO.: 74:5241a,5244a

TITLE: Manufacturing of bound, nonwoven fabric according to

the wet process
INVENTOR(S): Stephan, Rudolf;

INVENTOR(S): Stephan, Rudolf; Bug, Willi; Frank, Hans Ulrich
PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Ger. Offen., 7 pp. Addn. to Ger. Offen. 1,769,700

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: Faceur

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1915156	A	19701001	DE 1969-1915156	19690325 <
SE 352390	В	19721227	SE 1970-3946	19700302 <
NL 7003869	A	19700929	NL 1970-3869	19700318 <
FR 2035874	A6	19701224	FR 1970-10360	19700323 <
FR 2035874	B2	19740503		
GB 1296418	A	19721115	GB 1970-1296418	19700324 <
JP 49026103	В	19740705	JP 1970-24526	19700325 <
RIORITY APPLN. INFO.:			DE 1969-1915156 A	19690325 <
B The wet process for	nonwov	en fabrics	(Ger. Offen. 1,769,700)	was modified

The wet process for nonwoven fabrics (Ger. Offen. 1,769,700) was modified by bonding fibers with an acrylic polymer, polymanide, and a water-soluble cationic polycondensate. A suspension of viscose fibers, birch cellulose, and polymanide fibers in water containing a cationic condensate of urea, dicyandiamide, and RCHO was treated with an aqueous suspension of 93:3:3:1 Bu acrylate-N-methylolmethacrylamide-acrylonitrile-acrylic acid copolymer and an aqueous solution of 1:1:0.22 copolyamide of adipic acid, diethylenetriamine, and caprolactam, crossilnked with 1.4 mole epichlorohydrin. The stirred suspension was filtered and dried at 120° to give desired fleece having dry abrasion resistance (DIN 53112) 120 kg/cm2.

- IC D21H005-20
- CC 39 (Textiles)
- IT Binding materials

(acrylic polymers, for nonwoven fabrics)

```
25085-41-0, uses and miscellaneous 27968-41-8, uses and
    miscellaneous 28430-11-7 23928-66-7, uses and
    miscellaneous
    RL: USES (Uses)
       (binders, for nonwoven textiles)
    25085-41-0, uses and miscellaneous 28430-11-7
    28928-66-7, uses and miscellaneous
    RL: USES (Uses)
       (binders, for nonwoven textiles)
RN
    25085-41-0 CAPLUS
CN
    2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate (CA
    INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
    CM 2
    CRN 108-05-4
    CMF C4 H6 O2
Aco-CH-CH2
    CM 3
    CRN 79-10-7
    CMF C3 H4 O2
RN 28430-11-7 CAPLUS
    2-Propenoic acid, polymer with butyl 2-propenoate and
    N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
```

CRN 107-13-1 CMF C3 H3 N

H 2 C --- C H -- C --- N

CM

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 59 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:23615 CAPLUS Full-text

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 74:3825a,3828a

74:23615

TITLE:

Wet-bonded textile fibrous films

PATENT ASSIGNEE(S):

Badische Anilin- & Soda-Fabrik AG Fr. Demande, 9 pp.

SOURCE: CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2014444		19700417	FR 1969-21737	19690627 <
DE 1769700			DE	
GB 1263488			GB	
US 3635776		19720118	US	19690627 <
PRIORITY APPLN. INFO.:			DE	19680629 <
AB Fibrous films with	improv	ed tensile s	trength, hand, and tear	resistance were
prepared by the we	t-bondi:	ng of fiber	suspensions with aqueou	s polymeric
binders. Thus, an	aqueou	s suspension	of polycaprolactam fib	ers, ethoxylated

ted fatty alc., urea-cyanoguanidine-HCHO-ammonium chloride polycondensate, rosin soap, and Bu acrylate-acrylic acid N-(hydroxymethyl)methacrylamideacrylonitrile copolymers was placed on a film-forming machine, and the film dried to give a product suitable for manufacturing clothes and disposable articles with good mech. properties.

D04H; D06M

CC 39 (Textiles)

Binding materials (acrylic polymers-urea condensation products, for wet-bonding of synthetic fibrous films)

28928-66-7, uses and miscellaneous

RL: USES (Uses)

(binders, for synthetic fibrous films)

28928-66-7, uses and miscellaneous

RL: USES (Uses)

```
(binders, for synthetic fibrous films)
RN
   28928-66-7 CAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate,
    N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (CA INDEX
    NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
  H2C
Me_U_U_NH_CH2_OH
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo_U_CH_CH2
    CM 3
    CRN 107-13-1
    CMF C3 H3 N
H2C-CH-C-N
    CM 4
    CRN 79-10-7
    CMF C3 H4 O2
HO_U_CH_CH2
```

ACCESSION NUMBER: 1971:23614 CAPLUS Full-text
ORIGINAL REFERENCE NO.: 74:3825a,3828a
TITLE: Wet-bonded textile fibrous films
PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

L95 ANSWER 60 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

SOURCE:

Fr. Demande, 9 pp. CODEN: FRXXBL

DOCUMENT TYPE:

Patent French

LANGUAGE:

AB

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	FR 2014443		19700417	FR 1969-21736	19690627 <
	DE 1769699			DE	
	GB 1263098			GB	
	US 3657031		19720418	US	19690627 <
PRIO	RITY APPLN. INFO.:			DE	19680629 <

Hygienic disposable articles with improved hand were prepared from rayon or polycaprolactam fibers, pretreated with an organic quaternary ammonium salt, and wet-bonded with aqueous polymeric binders. Thus, an aqueous suspension of rayon fibers and dodecylbenzyidimethylammonium chloride was treated with lr1 Me acrylate-acrylonitrile copolymer, saponified with HN3, treated with Bu acrylate-acrylic acid-M-(hydroxymethyl)methacrylamide copolymers, sulfated ethylene oxide-nonylphenol adduct, and Turkey red oil, and placed on a filmforming machine to give a hygienic disposable article with fungicidal and bactericidal properties.

- IC D04H; A61F; D06M
- CC 39 (Textiles)
- IT Binding materials

(acrylic polymers, for ammonium salt-treated synthetic fibers in hygienic disposable article manufacture)

IT 24968-79-4, uses and miscellaneous 25085-41-0, uses and miscellaneous 2549-84-2 26604-01-3, uses and miscellaneous 28430-11-7 30660-66-3 30660-67-4, uses and miscellaneous 30660-68-5 RL: USES (Uses)

(binders, for hygienic disposable article manufacture from synthetic fibers treated with quaternary ammonium salts)

IT 28430-11-7

RL: USES (Uses)

(binders, for hygienic disposable article manufacture from synthetic fibers treated with quaternary ammonium salts)

RN 28430-11-7 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and

N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CMF C5 H9 N C



CM 2

CRN 141-32-2

CME C7 H12 O2

п-вио_С_сн__сн2

CM 3

CRN 79-10-7 CMF C3 H4 O2

но_0_сн_сн2

L95 ANSWER 61 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:23412 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 74:23412 ORIGINAL REFERENCE NO.: 74:3797a,3800a

TITLE: Self-cross-linking aqueous

emulsions

INVENTOR(S): Chujo, Sumi; Harada, Yoichi; Ueda, Shinichi; Tokuhara,

Shinji; Tanaka, Kazunobu; Kojima, Katsumi
S): Daicell Co., Ltd.

KIND DATE APPLICATION NO. DATE

PATENT ASSIGNEE(S): Daicell Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 10 pp.

SOURCE: Jpn. Tokkyo Kol CODEN: JAXXAD

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

____ _____ JP 45028999 B4 19700921 JP 19670630 <--AB Mixts. (35-80 parts) (A) of vinvl acetate or (and) vinvl propionate and acrylonitrile or (and) a methacrylate, 20-65 parts acrylate or methacrylate mixts. (B), 1-4.5 weight % (based on A + B) unsated, acid mixts., and \$20% (on A + B) vinyl monomer mixts, are emulsion copolymd, at pH <5 in the presence of 4-8% (on monomers) surfactants to give the title emulsions useful as binders and adhesives. For example, 10.2 g Triton X-200 and 15 g Nonion NS-230 in 323 g H2O are mixed with 0.6 g silicone defoaming agent, heated to 70° under N. and initially mixed at 75° with 5% of a mixture of vinvl acetate 123, acrylonitrile 6, Bu acrylate 171, acrylic acid 10.5, and glycidyl methacrylate 6 g and with 30% of a solution of 0.9 g K2S208 in 80 g H2O; the whole was stirred 30 min. The remainder of the monomer mixture was added dropwise during 3 hr, the whole heated to 80°, and the rest of the catalyst solution added dropwise during 10 min. The product is kept 1 hr at 80°, cooled to 35°, mixed with 0.6 g silicone defoaming agent (50% solids), and adjusted to pH 3.5 with NaHCO3 to give an emulsion (44% solids, 0.52% residual monomer, 20 cP viscosity, and 0.1-0.3 µ particle size, and 34.5 dynes/cm surface tension.) The emulsion is adjusted to pH 6, mixed with 10 weight % (on solids) SM-700 (etherified methylolmelamine) and 1 weight % (on solids) hardening agent, poured on a substrate, and cured 20 min at 150° to give a coating with 11 kg/cm2 elastic modulus and 85% insol. after 8 hr boiling in trichloroethylene.

INCL 26B131

```
CC
    36 (Plastics Manufacture and Processing)
    emulsion self crosslinking resin; crosslinkable resin;
    vinyl acetate copolymer; acrylonitrile copolymer; glycidyl methacrylate
     copolymer; methacrylate glycidyl copolymer
ΙT
    Adhesives, preparation
      Binding materials
        (butyl acrylate copolymers, crosslinked)
    Crosslinking
        (of butyl acrylate copolymer emulsions, for adhesives and binders)
     30640-80-3P, preparation
     RL: PREP (Preparation)
        (manufacture of, for adhesives and binders)
     30640-80-3P, preparation
     RL: PREP (Preparation)
        (manufacture of, for adhesives and binders)
RN
    30640-80-3 CAPLUS
CN
    2-Propenoic acid, 2-methyl-, 2-(2-oxiranylmethyl) ester, polymer with
     butyl 2-propenoate, ethenyl acetate, 2-propenenitrile and 2-propenoic acid
      (CA INDEX NAME)
    CM
    CRN 141-32-2
     CMF C7 H12 O2
    CM 2
    CRN 108-05-4
     CMF C4 H6 O2
 Aco-CH-CH2
    CM
         3
    CRN 107-13-1
     CMF C3 H3 N
 H 2 C - CH - C - N
    CM
     CRN 106-91-2
```

CMF C7 H10 O3

$$\overset{\circ}{ }_{\text{CH}_2-\circ} \overset{\circ}{\mathbb{L}} \overset{\text{CH}_2}{\mathbb{L}}_{-\text{Me}}^{\text{CH}_2}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

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L95 ANSWER 62 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:4594 CAPLUS Full-text

DOCUMENT NUMBER: 74:4594
ORIGINAL REFERENCE NO.: 74:735a,738a

TITLE: Optically blued fibrous sheets
PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Fr. Demande, 10 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2012370	A1	19700320	FR 1969-22557	19690703 <
PRIORITY APPLN. INFO.:			DE 1967-1769742 A	19680705 <

GI For diagram(s), see printed CA Issue.

- AB Sheets containing fibers of polycaprolactam (I), cellulose, or poly(ethylene terephthalate) are impregnated with bonding agents comprising aqueous dispersions of copolymers of Ia (R1 = H, R2 = R3 = Me) (II); R1 = Me, R2 = Bu, R3 = E; or R1 = H, R2 = Na, R3 = Bu as optical bluing agents 0.1-10, crosslinking olefins 1-15, and other olefins 75-98.9% to give optically blue bonded sheets of good washfastness and dry cleaning solvent resistance. E.g., a I sheet was impregnated with a 20% aqueous dispersion of a copolymer prepared from Et acrylate 88, acrylic acid 1, HOCH2NHCOCM:CR2 5, HO(CR2) 402CCH:CR2 5, and I1 % to give .apprx.30% copolymer pick-up and dried at 150° to give washfast and perchloroethylene-resistant optical bluing to the sheet.
- IC D06M015-00A; C08F015-00-
- CC 39 (Textiles)
- IT Binding materials

Fluorescent brightening agents

(dialkyl acrylamidoalkoxyterephthalate copolymers, for fibrous sheets) IT 27298-65-9, uses and miscellaneous

RL: USES (Uses)

(binding materials, for fibrous sheets containing optical brightening agents) $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right$

```
IT 30351-70-3 30351-71-4 31227-01-7, uses
    and miscellaneous
    RL: USES (Uses)
       (optical brightening agents, for bonded fibrous sheets)
    27288-65-9, uses and miscellaneous
    RL: USES (Uses)
       (binding materials, for fibrous sheets containing optical brightening
       agents)
    27288-65-9 CAPLUS
RN
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and
    N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)
    CM 1
    CRN 923-02-4
    CMF C5 H9 N O2
H2C
Me_U_U_NH_CH2_OH
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo-U-CH-CH2
    CM 3
    CRN 100-42-5
    CMF C8 H8
H2C==CH-Ph
    CM 4
    CRN 79-10-7
    CMF C3 H4 O2
но_0_сн_сн2
```

IT 30351-70-3 30351-71-4 31227-01-7, uses

and miscellaneous

RL: USES (Uses)

(optical brightening agents, for bonded fibrous sheets)

RN 30351-70-3 CAPLUS CN Terephthalic acid,

Terephthalic acid, 2-acrylamido-5-methoxy-, dimethyl ester, polymer with acrylic acid, N-(butoxymethyl)-2-methylacrylamide and ethyl acrylate (8CI) (CA INDEX NAME)

CM 1

CRN 28056-80-6 CMF C14 H15 N O6

CM 2

CRN 5153-77-5

CMF C9 H17 N O2

$$_{\rm n-Buo-CH}\,_{\rm CH}\,_{\rm 2-NH}\,_{\rm C}^{\rm C}\,_{\rm L}^{\rm CH}\,_{\rm Me}$$

CM 3

CRN 140-88-5

CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

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RN 30351-71-4 CAPLUS

CN Terephthalic acid, 2-acrylamido-5-methoxy-, dimethyl ester, polymer with acrylic acid, ethyl acrylate, 4-hydroxybutyl acrylate and N-(hydroxymethyl)-2-methylacrylamide (8CI) (CA INDEX NAME)

CM 1

CRN 28056-80-6

CMF C14 H15 N O6

$$\begin{array}{c} \text{MeO} \stackrel{\mathring{\text{U}}}{\stackrel{\mathring{\text{U}}}{\text{U}}} \text{CH} \stackrel{\text{CH}}{=} \text{CH}_2 \\ \text{MeO} \stackrel{\mathring{\text{U}}}{\stackrel{\text{U}}{\text{U}}} \text{CMe} \end{array}$$

CM 2

CRN 2478-10-6

CMF C7 H12 O3

CM 3

CRN 923-02-4

CMF C5 H9 N O2

CM ·

CRN 140-88-5

CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

31227-01-7 CAPLUS

Terephthalic acid, 2-butoxy-5-methacrylamido-, diethyl ester, polymer with acrylic acid, butyl acrylate, N-(hydroxymethyl)acrylamide, methacrylamide and styrene (8CI) (CA INDEX NAME)

CM 1

CRN 28056-81-7 CMF C20 H27 N O6

CM

CRN 924-42-5 CMF C4 H7 N O2

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM

CRN 100-42-5 CMF C8 H8

Hoc-Bh

5 CM

CRN 79-39-0 CMF C4 H7 N O

H2C O NH2

CM 6

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 63 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1970:436424 CAPLUS Full-text

DOCUMENT NUMBER: 73:36424

ORIGINAL REFERENCE NO.: 73:6025a,6028a

PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG SOURCE:

Fr. Addn., 4 pp. Addn. to Fr. 1388473 CODEN: FAXXA3

Patent

DOCUMENT TYPE: LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT NO.		KIND	DATE	APPLICATION	NO.	DATE	
	FR	94667			19691003	FR		19680520	<
	DE	1594934				DE			
	GB	1218649				GB			
IOE	RITY	APPLN.	INFO.:			DE		19670520	<

Sheets of agglutinated fibers

AB Sheets of agglutinated polyamide fibers with improved tensile strength are prepared by impregnating the fibers with aqueous dispersions of copolymers containing diallyl phthalate (I), dimethallyl terephthalate, or triallyl trimesate. For example, a copolymer prepared from Bu acrylate, acrylonitrile, N-methylolmethacrylamide, acrylic acid, I, and ammonium oxalate was used as

- the impregnation binder. IC D06M; D04H
- CC 39 (Textiles)
- IT Binding materials
 - (allyl ester copolymers, for nylon fibers)

28264-46-2, uses and miscellaneous 28264-75-7, uses and miscellaneous 28803-93-2

RL: USES (Uses)

(binding materials, for nylon fibers) 28264-46-2, uses and miscellaneous 28803-93-2 RL: USES (Uses) (binding materials, for nylon fibers)

28264-46-2 CAPLUS RN

CN Phthalic acid, diallyl ester, polymer with acrylic acid, acrylonitrile, butyl acrylate and N-(hydroxymethyl)-2-methylacrylamide (8CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 131-17-9 CMF C14 H14 O4

CM

CRN 107-13-1 CMF C3 H3 N

H 2 C --- C H -- C --- N

CM 5

CRN 79-10-7 CMF C3 H4 O2

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RN 28803-93-2 CAPLUS

CN Terephthalic acid, bis(2-methylally1) ester, polymer with acrylic acid, ethylene acrylate, 2-ethylhexy1 acrylate and N-(hydroxymethyl)-2-methylacrylamide (8CI) (CA INDEX NAME)

CM 1

CRN 2985-54-8

CMF C16 H18 O4

$$\begin{array}{c} \text{CH2} \\ \text{CH2} \\ \text{CH2} \end{array}$$

CM 2

CRN 2274-11-5

CMF C8 H10 O4

CM 3

CRN 923-02-4

CMF C5 H9 N O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

Et-CH-Bu-n

CM 5

CRN 79-10-7 CMF C3 H4 O2

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L95 ANSWER 64 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1970:101790 CAPLUS Full-text

DOCUMENT NUMBER: 72:101790

ORIGINAL REFERENCE NO.: 72:18485a,18488a

TITLE: Binders for textile pigments PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

product with excellent friction resistance.

KIND DATE

SOURCE: Fr. Demande, 7 pp.

CODEN: FRXXBL DOCUMENT TYPE: Patent.

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: PATENT NO.

FR 2003889

DE 1719395	DE	
GB 1210056	GB	
PRIORITY APPLN. INFO.:	DE	19680314 <
AB Poly(ammonium acrylate:	s) (I) containing copolymd.	butylene diacrylate (II),
methyl-enedimethacrylam	mide, hexylene diacrylate, o	or allyl adipate, and
butadiene-acrylonitrile	e-styrene - N-(hydroxymethy))methacrylamide (II I)
copolymer (12:3:4:1) ((V), butadiene-styrene-III o	copolymer (12:7:1), Bu
acrylate-acrylonitrile-	-vinyl chloride-III copolyme	er (12:4:3:1), or butadiene-
acrylonitrile-III copo:	Lymer (66.7:28.5:4.8) are us	sed as binders for textile
pigments to improve the	washing and friction fastr	ness of the textile. Thus, a
mixture of 50 parts 20	Cu phthalocyanine and 950	parts of an aqueous mixture
containing 5 parts I,	copolymd. with 0.1% II, and	35 parts IV was used for

printing cotton textile. The fabric was dried 5 min at 140° to give soft

19691114 FR 1969-7123

APPLICATION NO. DATE

19690313 <--

IC COSF; DOGP

```
CC 39 (Textiles)
    Einding materials
        (acrylic acid polymer-methacrylamide derivative polymer, for pigments on
        textiles)
     25135-82-4, uses and miscellaneous 27288-64-8, uses and miscellaneous 27288-65-9, uses and miscellaneous 27288-66-0, uses and
     miscellaneous
                    27288-68-2, uses and miscellaneous
     RL: USES (Uses)
        (binders from acrylate copolymers containing, for pigments on textiles)
    27288-65-9, uses and miscellaneous
     RL: USES (Uses)
        (binders from acrylate copolymers containing, for pigments on textiles)
RN
     27288-65-9 CAPLUS
    2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and
     N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)
     CM 1
     CRN 923-02-4
     CMF C5 H9 N O2
 H2C O
Me U U NH-CH2-OH
     CM 2
     CRN 141-32-2
     CMF C7 H12 O2
 n-Buo-Ü-CH-CH?
     CM 3
     CRN 100-42-5
     CMF C8 H8
 H2C==CH=Ph
     CM 4
     CRN 79-10-7
```

CMF C3 H4 O2

FILE 'HOME' ENTERED AT 16:36:24 ON 29 MAR 2010

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SEARCH HISTORY
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=> d stat que 135; d stat que 136; d stat que 138; d his nofile
L7
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
              OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
             3 SEA FILE=REGISTRY POLYLINK L8
L9
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
              SEL L10 1- RN : 3 TERMS
L12
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
          587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L14
L27
         22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
L28
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
         6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
L35
               OR L12)
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
              OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
              SEL L10 1- RN :
                                    3 TERMS
L12
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
                                           s02~10
             CH2~ 0~ CH2
VAR G1=4/8/10/12
VAR G2=N/O
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E2 RC AT 12
CONNECT IS E1 BC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 14
STEREO ATTRIBUTES: NONE
L17
               SCR 2043
L19
        420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L20
               STR
                      Ak @8 Cb @9
```

VAR G1=8/9

VAR G2=H/ME

NODE ATTRIBUTES:
CONNECT IS E1 RC AT 8
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 9
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20 L31 STR

L31

$$\begin{array}{c} \overset{4}{\text{G1}} & \overset{1}{\text{G2}} & \overset{8}{\text{H}} & \overset{1}{\text{G1}} & \overset{13}{\text{G1}} & \overset{18}{\text{H}} & \overset{18}{\text{G1}} & \overset{18$$

G4 101

Page 2-A

```
_CH2___SO2___O
73 74 75
Page 3-A
VAR G1=H/ME
VAR G2=H/ME/COOH
VAR G3=CH2/97
VAR G4=2/6/11/16/23/29/37/44/54/85/67/95
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 33
CONNECT IS E2 RC AT 39
CONNECT IS E1 RC AT 41
CONNECT IS E2 RC AT 48
CONNECT IS E1 RC AT 51
CONNECT IS E1 RC AT 63
CONNECT IS E1 RC AT 75
CONNECT IS E1 RC AT 88
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 97
STEREO ATTRIBUTES: NONE
L33
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
T.34
         48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
               0>2
L36
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
               OR L7 OR L12)
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
```

VAR G1=4/8/10/12
VAR G2=N/O
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E2 RC AT 12
CONNECT IS E1 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE L17 SCR 2043

L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17 L20 STR

VAR G1=8/9
VAR G2=H/ME
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 8
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 9
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20 L31 STR

G4 101

Page 1-A

Page 2-A

Page 3-A

```
VAR G1=H/ME
VAR G2=H/ME/COOH
VAR G3=CH2/97
VAR G4=2/6/11/16/23/29/37/44/54/85/67/95
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 33
CONNECT IS E2 RC AT 39
CONNECT IS E1 RC AT 41
CONNECT IS E2 RC AT 48
CONNECT IS E1
             RC AT 51
CONNECT IS E1
             RC AT
                     63
CONNECT IS E1 RC AT 75
CONNECT IS E1 RC AT 88
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

L33

STEREO ATTRIBUTES: NONE

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 97

L34 48120 SEA FILE-REGISTRY SPE-ON ABB-ON 16.138/RID AND PMS/CI AND O>2
L38 296 SEA FILE-REGISTRY SPE-ON ABB-ON L22 AND (L34 OR L33) AND (L14 OR L7)

(FILE 'HOME' ENTERED AT 15:04:08 ON 29 MAR 2010)
D SAVED

197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31

FILE 'REGISTRY' ENTERED AT 15:05:29 ON 29 MAR 2010 ACT PEZ676REG/A

6 SEA SPE=ON ABB=ON (35919-18-7/BI OR 37001-63-1/BI OR 42884-82-2/BI OR 53754-89-5/BI OR 58479-12-2/BI OR 69572-24-3/B T) ACT PEZ676REG2/A L2 50 SEA SPE=ON ABB=ON (12190-79-3/BI OR 518050-52-7/BI OR 7440-44-0/BI OR 7782-42-5/BI OR 105-58-8/BI OR 108-32-7/BI OR 198826-55-0/BI OR 24968-79-4/BI OR 25036-16-2/BI OR 25134-58-1/ BI OR 25214-69-1/BI OR 25511-01-7/BI OR 25749-57-9/BI OR 26636-08-8/BI OR 26950-51-6/BI OR 27290-61-5/BI OR 27380-08-1/B I OR 28326-46-7/BI OR 30396-85-1/BI OR 31213-82-8/BI OR 35919-18-7/BI OR 37001-63-1/BI OR 411234-54-3/BI OR 42884-82-2/ BI OR 43094-74-2/BI OR 4437-85-8/BI OR 518050-53-8/BI OR 518050-54-9/BI OR 518050-55-0/BI OR 518050-56-1/BI OR 518050-57 -2/BI OR 518050-58-3/BI OR 53754-89-5/BI OR 58479-12-2/BI OR 616-38-6/BI OR 623-53-0/BI OR 69572-24-3/BI OR 716378-75-5/BI OR 716378-76-6/BI OR 716378-77-7/BI OR 7440-06-4/BI OR 7440-21-3/BI OR 7440-42-8/BI OR 7440-50-8/BI OR 872-36-6/BI OR 882693-00-7/BI OR 9003-18-3/BI OR 9003-55-8/BI OR 9004-32-4/BI OR 96-49-1/BT) D SCA L1 O SEA SPE=ON ABB=ON L2 AND S/ELS E SODIUM DODECYLBENZENESULFONATE/CN L41 SEA SPE=ON ABB=ON "SODIUM DODECYLBENZENESULFONATE"/CN D SCA E BENZENESULFONIC ACID, DODECYL-, SODIUM SALT/CN E 2-BENZENESULFONIC ACID, DODECYL-, SODIUM SALT/CN L_5 1 SEA SPE=ON ABB=ON "2-BENZENESULFONYL-4-(2-((TERT-BUTOXYCARBON YL) (METHYL) AMINO) ETHOXY) INDOLE-1-CARBOXYLIC ACID TERT-BUTYL ESTER"/CN D SCA E BENZENESULFONIC ACID, DODECYL-, SODIUM SALT/CN 1 SEA SPE=ON ABB=ON "BENZENESULFONIC ACID, DODECYL-, SODIUM L6 SALT, COMPD. WITH 2-(DIMETHYLAMINO) ETHYL 2-METHYL-2-PROPENOATE HOMOPOLYMER AND N, N'-METHYLENEBIS (2-PROPENAMIDE) POLYMER WITH 2-PROPENOIC ACID SODIUM SALT"/CN D SCA D IDE L4 50 SEA SPE=ON ABB=ON 25155-30-0/CRN E GLYCIDYL METHACRYLATE/CN 1.8 2 SEA SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN) D SCA L*** DEL 1 S L8 AND RELATED POLYMERS/FA L*** DEL ANALYZE L*** 1- RN LNK\$: 2 TERMS L*** DEL 2 S L*** L9 3 POLYLINK L8 D SCA 3 SEA SPE=ON ABB=ON (L8 OR L9) L10 SET SMARTSELECT ON L11 SEL L10 1- RN : 3 TERMS SET SMARTSELECT OFF 20962 SEA SPE=ON ABB=ON L11/CRN D COST FULL

E N-METHYLOLMETHACRYLATE/CN

```
E N-METHYLOLMETHACRYLAMIDE/CN
L13
             1 SEA SPE=ON ABB=ON N-METHYLOLMETHACRYLAMIDE/CN
               D SCA
               D REG L13
           587 SEA SPE=ON ABB=ON 923-02-4/CRN
L14
L15
               STR
            50 SEA SSS SAM L15
L16
L17
               SCREEN 2043
L18
            50 SEA SSS SAM L15 AND L17
L19
        420517 SEA SSS FUL L15 AND L17
L20
               STR
1.21
             50 SEA SUB=L19 SSS SAM L20
       198213 SEA SUB=L19 SSS FUL L20
L22
                SAVE TEMP L22 PEZ676SUB1/A
T-23
         24539 SEA SPE=ON ABB=ON L22 AND C11H20O2
L24
         59534 SEA SPE=ON ABB=ON L22 AND C7H12O2
L25
              5 SEA SPE=ON ABB=ON L1 AND L23
               D IDE
L26
              1 SEA SPE=ON ABB=ON L24 AND L1
               D IDE
1.27
          22795 SEA SPE=ON ABB=ON 103-11-7/CRN
L28
          54890 SEA SPE=ON ABB=ON 141-32-2/CRN
L29
               STR
    FILE 'STNGUIDE' ENTERED AT 15:36:21 ON 29 MAR 2010
    FILE 'REGISTRY' ENTERED AT 15:43:08 ON 29 MAR 2010
1.30
               STR 1.29
     FILE 'STNGUIDE' ENTERED AT 15:44:09 ON 29 MAR 2010
    FILE 'REGISTRY' ENTERED AT 15:55:04 ON 29 MAR 2010
L31
               STR L30
L32
            50 SEA SUB=L19 SSS SAM L31
T.33
        197550 SEA SUB=L19 SSS FUL L31
               SAVE TEMP L33 PEZ676SUB2/A
               E 16.138/RID
         48120 SEA SPE=ON ABB=ON 16.138/RID AND PMS/CI AND 0>2
L34
L35
          6225 SEA SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7 OR L12)
         112029 SEA SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14 OR L7 OR L12)
6225 SEA SPE=ON ABB=ON L35 AND NC>1
L36
L37
L38
           296 SEA SPE=ON ABB=ON L22 AND (L34 OR L33) AND (L14 OR L7)
     FILE 'CAPLUS' ENTERED AT 16:09:31 ON 29 MAR 2010
               ACT PEZ676CAAII/A
L39 (
          8848) SEA SPE=ON ABB=ON MORI H?/AU
           848) SEA SPE=ON ABB=ON YAMAKAWA M?/AU
T.40 (
L41 (
             8) SEA SPE=ON ABB=ON FUKUMINE M?/AU
L42 (
           124) SEA SPE=ON ABB=ON TOKURA K?/AU
L43 (
            16) SEA SPE=ON ABB=ON L39 AND (L40 OR L41 OR L42)
L44 (
            10) SEA SPE=ON ABB=ON L43 NOT BOMBYX/OBI
L45
             7 SEA SPE=ON ABB=ON L44 AND (ELECTRODE#/OBI OR BATTER?/OBI)
L46
           281 SEA SPE=ON ABB=ON L38
             0 SEA SPE=ON ABB=ON L45 AND L46
L47
         64955 SEA SPE=ON ABB=ON CAPACITOR#/CW
L48
               E BINDERS+ALL/CT
L49
        40291 SEA SPE=ON ABB=ON BINDERS+OLD/CT
             1 SEA SPE=ON ABB=ON L38 AND L48 AND L49
L50
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1.51
            28 SEA SPE=ON ABB=ON L46 AND (L48 OR L49)
L52
          5714 SEA SPE=ON ABB=ON L35
L53
         92433 SEA SPE=ON ABB=ON L36
L54
             1 SEA SPE=ON ABB=ON L52 AND L48 AND L49
L55
             14 SEA SPE=ON ABB=ON L53 AND L48 AND L49
L56
        366578 SEA SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
         1728 SEA SPE=ON ABB=ON L52 AND L56
L57
L58
            50 SEA SPE=ON ABB=ON L52 AND L56 AND (L48 OR L49)
       277497 SEA SPE=ON ABB=ON L22
L59
L60
       235906 SEA SPE=ON ABB=ON L33
L61
         67665 SEA SPE=ON ABB=ON L34
L62
           735 SEA SPE=ON ABB=ON L14
L63
            59 SEA SPE=ON ABB=ON L7
L64
          23391 SEA SPE=ON ABB=ON L12
L65
              5 SEA SPE=ON ABB=ON L45 AND (L59 OR L60 OR L61 OR L62 OR L63
                OR L64)
                D SCA
L66
         197281 SEA SPE=ON ABB=ON ELECTRODE#/CW
         44983 SEA SPE=ON ABB=ON (DOUBLE LAYER?)/BI
341 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
L67
L68
L69
           130 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L70
           104 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
L71
          1808 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
L72
         17744 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L73
           126 SEA SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR L72)
           37 SEA SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
28 SEA SPE=ON ABB=ON L70 AND (L71 OR L72)
L74
L75
L76
           349 SEA SPE=ON ABB=ON L71 AND L72
           25 SEA SPE=ON ABB=ON L73 AND (L74 OR L75 OR L76)
L77
L78
             4 SEA SPE=ON ABB=ON L74 AND (L75 OR L76)
L79
             2 SEA SPE=ON ABB=ON L75 AND L76
L80
            26 SEA SPE=ON ABB=ON (L77 OR L78 OR L79)
          60 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L52 509 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L53
L81
L82
1.83
            12 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L46
L84
            60 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L52 AND L53
             0 SEA SPE=ON ABB=ON L62 AND L63 AND L64
L85
           60 SEA SPE=ON ABB=ON L35 AND (L73 OR L74 OR L75 OR L76)
L86
           106 SEA SPE=ON ABB=ON (L58 OR L55 OR L51 OR L80 OR L83 OR L86)
102 SEA SPE=ON ABB=ON L87 AND PATENT/DT
L87
L88
L89
             4 SEA SPE=ON ABB=ON L87 NOT L88
L90
            60 SEA SPE=ON ABB=ON L88 AND (PD<20031024 OR AD<20031024 OR
                PRD<20031024)
     FILE 'REGISTRY' ENTERED AT 16:33:48 ON 29 MAR 2010
                D STAT OUE L35
                D STAT QUE L36
                D STAT OUE L38
     FILE 'CAPLUS' ENTERED AT 16:33:59 ON 29 MAR 2010
                D OUE NOS L58
                D QUE NOS L55
                D OUE NOS L51
                D QUE NOS L80
                D QUE NOS L83
               D OUE NOS L86
           106 SEA SPE=ON ABB=ON (L58 OR L55 OR L51 OR L80 OR L83 OR L86)
L92
           102 SEA SPE=ON ABB=ON L91 AND PATENT/DT
             4 SEA SPE=ON ABB=ON L91 NOT L92
L93
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L94 60 SEA SPE=ON ABB=ON L92 AND (PD<20031024 OR AD<20031024 OR PRD<20031024)

L95 64 SEA SPE=ON ABB=ON (L93 OR L94)
D IBIB ABS HITIND HITSTR L95 1-64

FILE 'HOME' ENTERED AT 16:36:24 ON 29 MAR 2010

D STAT QUE L35 D STAT QUE L36 D STAT QUE L38

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